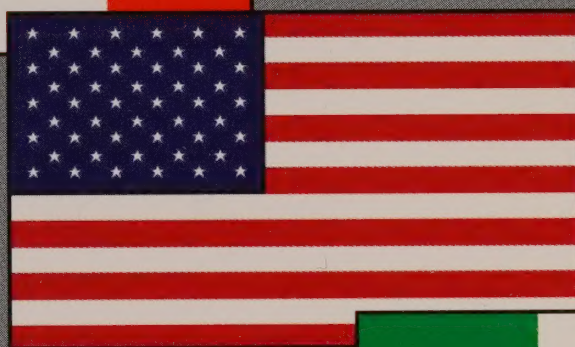


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1996 NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK



A GUIDEBOOK
FOR FIRST RESPONDERS DURING
THE INITIAL PHASE OF A
HAZARDOUS MATERIALS/DANGEROUS GOODS
INCIDENT

SHIPPING DOCUMENTS (PAPERS)*

The shipping document provides vital information when responding to a hazardous materials/dangerous goods** incident. The shipping document contains information needed to identify the materials involved. Use this information to initiate protective actions for your own safety and the safety of the public. The shipping document contains the proper shipping name (see blue-bordered pages), the hazard class or division of the material(s), ID number (see yellow-bordered pages), and, where appropriate, the Packing Group. In addition, there must be information available that describes the hazards of the material which can be used in the mitigation of an incident. The information must be entered on or be with the shipping document. This requirement may be satisfied by attaching a guide from the NAERG96 to the shipping document, or by having the entire guidebook available for ready reference. Shipping documents are required for most dangerous goods in transportation. Shipping documents are kept in

- the cab of the motor vehicle,
- the possession of the train crew member,
- a holder on the bridge of a vessel, or
- an aircraft pilot's possession.

EMERGENCY CONTACT 1-000-000-0000		EXAMPLE OF EMERGENCY RESPONSE TELEPHONE NUMBER	
NO. & TYPE OF PACKAGES	DESCRIPTION OF ARTICLES	HAZARD CLASS OR DIVISION NO.	QUANTITY
1 TANK TRUCK	ISOPROPANOL	3 UN1219 II	3,000 LITERS
SHIPPING NAME		ID NUMBER	PACKING GROUP

EXAMPLE OF PLACARD AND PANEL WITH ID NUMBER

The 4-digit ID Number may be shown on the diamond-shaped placard or on an adjacent orange panel displayed on the ends and sides of a cargo tank, vehicle or rail car.



A Numbered
Placard

or

A Placard
and an
Orange Panel



1219

* For the purposes of this book, the terms shipping document/shipping paper are synonymous.

** For the purposes of this book, the terms hazardous materials/dangerous goods are synonymous.

RESIST RUSHING IN !
APPROACH INCIDENT FROM UPWIND
STAY CLEAR OF ALL SPILLS, VAPORS, FUMES AND SMOKE

**HOW TO USE THIS GUIDEBOOK DURING AN INCIDENT INVOLVING
DANGEROUS GOODS**

ONE IDENTIFY THE MATERIAL BY FINDING ANY ONE OF THE FOLLOWING:

THE 4-DIGIT ID NUMBER ON A PLACARD OR ORANGE PANEL

THE 4-DIGIT ID NUMBER (after UN/NA) ON A SHIPPING DOCUMENT OR PACKAGE

THE NAME OF THE MATERIAL ON A SHIPPING DOCUMENT, PLACARD OR PACKAGE

IF AN ID NUMBER OR THE NAME OF THE MATERIAL CANNOT BE FOUND, SKIP TO THE NOTE BELOW.

TWO LOOK UP THE MATERIAL'S 3-DIGIT GUIDE NUMBER IN EITHER:

THE ID NUMBER INDEX..(the yellow-bordered pages of the guidebook)

THE NAME OF MATERIAL INDEX..(the blue-bordered pages of the guidebook)

If the guide number is supplemented with the letter "P", it indicates that the material may undergo violent polymerization if subjected to heat or contamination.

If the index entry is highlighted, **LOOK FOR THE ID NUMBER AND NAME OF THE MATERIAL** IN THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (the green-bordered pages). If necessary, **BEGIN PROTECTIVE ACTIONS IMMEDIATELY** (see the section on Protective Actions).

USE THE FOLLOWING GUIDES FOR ALL EXPLOSIVES:

DIVISION 1.1 (EXPLOSIVES A) - GUIDE 112
DIVISION 1.2 (EXPLOSIVES A & B) - GUIDE 112
DIVISION 1.3 (EXPLOSIVES B) - GUIDE 112
DIVISION 1.4 (EXPLOSIVES C) - GUIDE 114
DIVISION 1.5 (BLASTING AGENTS) - GUIDE 112
DIVISION 1.6 - GUIDE 112

THREE TURN TO THE NUMBERED GUIDE (the orange-bordered pages) AND READ CAREFULLY.

NOTE IF A NUMBERED GUIDE CANNOT BE OBTAINED BY FOLLOWING THE ABOVE STEPS, AND A PLACARD CAN BE SEEN, LOCATE THE PLACARD IN THE TABLE OF PLACARDS, THEN GO TO THE 3-DIGIT GUIDE SHOWN NEXT TO THE SAMPLE PLACARD.

IF A REFERENCE TO A GUIDE CANNOT BE FOUND AND THIS INCIDENT IS BELIEVED TO INVOLVE DANGEROUS GOODS, TURN TO GUIDE 111 NOW, AND USE IT UNTIL ADDITIONAL INFORMATION BECOMES AVAILABLE. If the shipping document lists an emergency response telephone number, call that number. If the shipping document is not available, or no emergency response telephone number is listed, **IMMEDIATELY CALL the appropriate emergency response agency listed on the inside back cover of this guidebook.** Provide as much information as possible, such as the name of the carrier (trucking company or railroad) and vehicle number.

SAFETY PRECAUTIONS

APPROACH CAUTIOUSLY FROM UPWIND. Resist the urge to rush in; others cannot be helped until the situation has been fully assessed.

SECURE THE SCENE. Without entering the immediate hazard area, isolate the area and assure the safety of people and the environment, keep people away from the scene and outside the safety perimeter. Allow enough room to move and remove your own equipment.

IDENTIFY THE HAZARDS. Placards, container labels, shipping documents and/or knowledgeable persons on the scene are valuable information sources. Evaluate all available information and consult the recommended guide to reduce immediate risks. **New information, provided by the shipper or obtained from another authoritative source, may change some of the emphasis or details found in the guide.** Remember, the guide provides only the most important and worst case scenario information for the initial response in relation to a family or class of dangerous goods. As more material-specific information becomes available, the response should be tailored to the situation.

ASSESS THE SITUATION. Consider the following:

- Is there a fire, a spill or a leak?
- What are the weather conditions?
- What is the terrain like?
- Who/what is at risk: people, property or the environment?
- What actions should be taken: Is an evacuation necessary?
Is diking necessary? What resources (human and equipment) are required and are readily available?
- What can be done immediately?

OBTAIN HELP. Advise your headquarters to notify responsible agencies and call for assistance from qualified personnel.

DECIDE ON SITE ENTRY. Any efforts made to rescue persons, protect property or the environment must be weighed against the possibility that you could become part of the problem. Enter the area only when wearing appropriate protective gear (see the section on protective clothing and equipment at the back of this guidebook).

RESPOND. Respond in an appropriate manner. Establish a command post and lines of communication. Rescue casualties where possible and evacuate if necessary. Maintain control of the site. Continually reassess the situation and modify the response accordingly. The first duty is to consider the safety of people in the immediate area, including your own.

ABOVE ALL — Do not walk into or touch spilled material. Avoid inhalation of fumes, smoke and vapors, even if no dangerous goods are known to be involved. Do not assume that gases or vapors are harmless because of lack of a smell—odorless gases or vapors may be harmful.

WHO TO CALL FOR ASSISTANCE

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Follow the steps outlined in your organization's standard operating procedures and/or local emergency response plan for obtaining qualified assistance. Generally, the notification sequence and requests for technical information beyond what is available in this guidebook should occur in the following order:

1. ORGANIZATION/AGENCY

Notify your organization/agency. This will set in motion a series of events based upon the information provided. Actions may range from dispatching additional trained personnel to the scene to activating the local emergency response plan. Ensure that local fire and police departments have been notified.

2. EMERGENCY RESPONSE TELEPHONE NUMBER

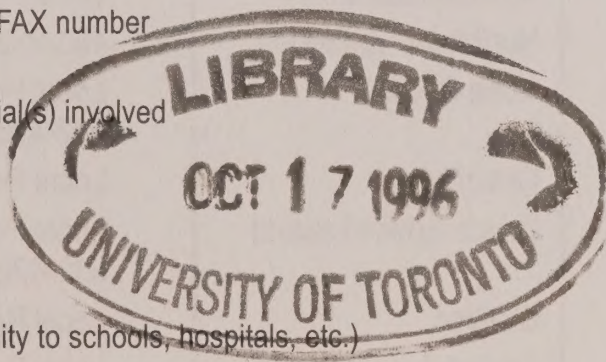
Locate and call the telephone number listed on the shipping document. The person answering the phone at the listed emergency response number must be knowledgeable of the materials and mitigation actions to be taken, or must have immediate access to a person who has the required knowledge.

3. NATIONAL ASSISTANCE

Contact the appropriate emergency response agency listed on the inside back cover of this guidebook when the emergency response telephone number is not available. Upon receipt of a call describing the nature of the incident, the agency will provide immediate advice on handling the early stages of the incident. The agency will also contact the shipper or manufacturer of the material for more detailed information and request on-scene assistance when necessary.

Collect and provide as much of the following information as can safely be obtained:

Your name, call back telephone number, FAX number
Location and nature of problem
Name and identification number of material(s) involved
Shipper/consignee/point of origin
Carrier name, rail car or truck number
Container type and size
Quantity of material transported/released
Local conditions (weather, terrain, proximity to schools, hospitals, etc.)
Injuries and exposures
Local emergency services that have been notified



CANADA

1. CANUTEC

CANUTEC is the **Canadian Transport Emergency Centre** operated by the Transport Dangerous Goods Directorate of Transport Canada.

CANUTEC provides a national bilingual (French and English) advisory service and is staffed by professional chemists experienced and trained in interpreting technical information and providing emergency response advice.

**In an emergency, CANUTEC may be called collect at
613-996-6666 (24 hours)**

**In a non-emergency situation, please call the information line at
613-992-4624 (24 hours).**

2. PROVINCIAL AGENCIES

Although technical information and emergency response assistance can be obtained from **CANUTEC**, there are federal and provincial regulations requiring the reporting of dangerous goods incidents to certain authorities.

The following list of provincial agencies is supplied for your convenience.

Province	Emergency Authority and/or Telephone Number
Alberta	Local Police
British Columbia	Local Police or 604-387-5956
Manitoba	Local Police or fire brigade, as appropriate, or 204-945-4888
New Brunswick	Local Police or 1-800-565-1633* or 902-426-6030
Newfoundland	Local Police or 709-772-2083
Northwest Territories	403-920-8130
Nova Scotia	Local Police or 1-800-565-1633* or 902-426-6030
Ontario	Local Police
Prince Edward Island	Local Police or 1-800-565-1633* or 902-426-6030
Quebec	Local Police
Saskatchewan	Local Police or 1-800-667-7525
Yukon Territory	403-667-7244

* This number is not accessible from outside the provinces of New Brunswick, Nova Scotia or Prince Edward Island.

NOTE:

1. The appropriate federal agency must be notified in the case of rail, air or marine incidents.
2. The nearest police department must be notified in the case of lost, stolen or misplaced explosives, radioactive materials or infectious substances.
3. **CANUTEC must** be notified in the case of:
 - a. lost, stolen or misplaced infectious substances;
 - b. an incident involving infectious substances or radioactive materials;
 - c. an incident where the shipping documents display **CANUTEC's** telephone number 613-996-6666 as the emergency telephone number; or
 - d. a dangerous goods incident in which a railway vehicle is involved.

UNITED STATES

1. **CHEMTREC®**, a service of the Chemical Manufacturers Association, can be reached as follows:

CALL **CHEMTREC®** (24 hours)

1-800-424-9300 (Toll-free in the U.S. and Canada)

703-527-3887 (For calls originating elsewhere; collect calls are accepted)

or

2. **CHEM-TEL, INC.**, an emergency response communication service, can be reached as follows:

CALL **CHEM-TEL, INC.** (24 hours)

1-800-255-3924 (Toll-free in the U.S. and Canada)

813-979-0626 (For calls originating elsewhere; collect calls are accepted)

The emergency response information services shown above have requested to be listed as providers and have agreed to provide emergency response information to all callers.

CHEMTREC® and CHEM-TEL, INC. maintain a current list of state and Federal radiation authorities who provide information and technical assistance on handling incidents involving radioactive materials.

3. **NATIONAL RESPONSE CENTER (NRC)**

The NRC, which is operated by the U.S. Coast Guard, receives reports required when dangerous goods and hazardous substances are spilled. After receiving notification of an incident, the NRC will immediately notify the appropriate Federal On-Scene Coordinator and concerned Federal agencies. Federal law requires that anyone who releases into the environment a reportable quantity of a hazardous substance (including oil when water is, or may be affected) or a material identified as a marine pollutant, must **immediately** notify the NRC. When in doubt as to whether the amount released equals the required reporting levels for these materials, the NRC should be notified.

CALL **NRC** (24 hours)

1-800-424-8802 (Toll-free in the U.S. and Canada)

202-267-2675 in District of Columbia

Calling the emergency response telephone number, CHEMTREC® or CHEM-TEL, INC., does not constitute compliance with regulatory requirements to call the NRC.

4. **MILITARY SHIPMENTS**

For assistance at incidents involving materials being shipped by, for, or to the Department of Defense (DOD), call one of the following numbers (24 hours):

703-697-0218 (call collect) (U.S. Army Operations Center) for incidents involving explosives and ammunition.

1-800-851-8061 (toll free) (Defense Logistics Agency) for incidents involving dangerous goods other than explosives and ammunition.

The above numbers are for **emergencies** only.

MEXICO

1. **SETIQ** (Emergency Transportation System for the Chemical Industry), a service of the National Association of Chemical Industries (ANIQ), can be reached as follows:

Call **SETIQ** (24 hours)

91-800-00-214 in the Mexican Republic

For calls originating in Mexico City and the Metropolitan Area

575-0838, 575-0842 or 559-1588

For calls originating elsewhere, call

0-11-52-5-575-0838 or 0-11-52-5-575-0842

2. **CECOM**, the National Center for Communications of the Civil Protection Agency, can be reached as follows:

CALL **CECOM** (24 hours)

91-800-00-413 in the Mexican Republic

For calls originating in Mexico City and the Metropolitan Area

550-1496, 550-1552, 550-1485, or 550-4885

FAX 616-5560 or 616-5561

For calls originating elsewhere, call

0-11-52-5-550-1496, 0-11-52-5-550-1552, 0-11-52-5-550-1485, or 0-11-52-5-550-4885

ABOUT THIS BOOK

The 1996 North American Emergency Response Guidebook (NAERG96) was developed jointly by Transport Canada (TC), the U.S. Department of Transportation (DOT) and the Secretariat of Communications and Transportation of Mexico (SCT) for use by fire fighters, police, and other emergency services personnel who may be the first to arrive at the scene of a transportation incident involving dangerous goods. **It is primarily a guide to aid first responders in quickly identifying the specific or generic hazards of the material(s) involved in the incident, and protecting themselves and the general public during the initial response phase of the incident.** For the purposes of this guidebook, the "initial response phase" is that period following arrival at the scene of an incident during which the presence and/or identification of dangerous goods is confirmed, protective actions and area securement are initiated, and assistance of qualified personnel is requested. It is not intended to provide information on the physical or chemical properties of dangerous goods.

This guidebook will assist responders in making initial decisions upon arriving at the scene of a dangerous goods incident. It should not be considered as a substitute for emergency response training, knowledge or sound judgment. NAERG96 does not address all possible circumstances that may be associated with a dangerous goods incident. It is primarily designed for use at a dangerous goods incident occurring on a highway or railroad. Be mindful that there may be limited value in its application at fixed facility locations.

NAERG96 incorporates dangerous goods lists from the most recent United Nations Recommendations as well as from other international and national regulations. Explosives are not listed individually by either proper shipping name or ID Number. They do, however, appear under the general heading "Explosives" on the first page of the ID Number index (yellow-bordered pages) and alphabetically in the Name of Material index (blue-bordered pages).

All guides have been revised and are now presented in a two (2) page format and identified by three (3) digit numbers. The letter "P" following the guide number in the yellow-bordered and blue-bordered pages identifies those materials which present a polymerization hazard under certain conditions; for example, Acrolein, inhibited, Guide **131P**. Each orange-bordered, numbered guide provides essential guidance in a form which is designed for first responders with limited dangerous goods training. A numbered guide is assigned to each material listed in the indexes. Neither the order in which the guides are presented nor the guide number itself is of any significance. Since many materials represent similar types of hazards that call for similar initial emergency response actions, only a limited number of guides are required. The orange-bordered guides are not applicable when materials of different classes and/or divisions are involved in an incident and are intermingled. Incidents involving more than one class of material require the incident commander to obtain

informed advice as soon as the scope of the incident can be determined. Materials involved in an incident may, by themselves, be nonhazardous; however, a combination of several materials or the involvement of a single material in a fire, may still produce serious health, fire or explosion hazards.

First responders at the scene of a dangerous goods incident, should seek additional specific information about any material in question as soon as possible. The information received by contacting the appropriate emergency response agency, the emergency response number on the shipping document, or by consulting the information on or accompanying the shipping document, may be more specific and accurate than this guidebook in providing guidance for the materials involved.

BECOME FAMILIAR WITH THIS GUIDEBOOK BEFORE USING IT DURING AN EMERGENCY! In the U.S., according to the requirements of the U.S. Occupational Safety and Health Administration (OSHA 1910.120), and regulations issued by the U.S. Environmental Protection Agency, first responders must be trained regarding the use of this guidebook.

HOW TO USE THE GUIDES EFFECTIVELY

The titles of the guides identify the general hazards of the dangerous goods covered; however, the titles do not necessarily reflect the hazard classification under transportation regulations.

Each guide is divided into three main sections: the first section describes potential hazards that the material may display in terms of fire/explosion and health effects upon exposure. The emergency responder should consult this section first since it indicates in very brief form the dangers the material may present. This allows the responder to make decisions regarding the protection of the emergency response team as well as the surrounding population.

The second section outlines suggested public safety measures based on the situation at hand. It provides general information regarding immediate isolation of the incident site, the recommended type of protective clothing and respiratory protection. Suggested evacuation distances are listed for small and large spills and for fire situations.

The third section covers emergency response actions and first aid. It outlines special precautions for incidents which involve fire, spill or chemical exposure. Several recommendations are listed under each part which will further assist in the decision making process.

The information on first aid is general guidance prior to seeking medical care. It is difficult to be specific about the kind of medical assistance that should be sought since factors such as the extent of the exposure, the material(s) involved, the nature and severity of the injuries, the proximity to emergency and medical services may vary. When human exposure has occurred, immediate efforts should be made to remove all contaminated clothing and shoes and to obtain medical assistance in evaluating the injuries and need for hospitalization.

HAZARD CLASSIFICATION SYSTEM

The hazard class of dangerous goods is indicated either by its class (or division) number or name. For a placard corresponding to the primary hazard class of a material, the hazard class or division number must be displayed in the lower corner of the placard. However, no hazard class or division number may be displayed on a placard representing the subsidiary hazard of a material. For other than Class 7 or the OXYGEN placard, text indicating a hazard (for example, "CORROSIVE") is not required. Text is shown only in the U.S. The hazard class or division number must appear on the shipping document after each shipping name.

Class 1 - Explosives

Division 1.1	Explosives with a mass explosion hazard
Division 1.2	Explosives with a projection hazard
Division 1.3	Explosives with predominantly a fire hazard
Division 1.4	Explosives with no significant blast hazard
Division 1.5	Very insensitive explosives; blasting agents
Division 1.6	Extremely insensitive detonating articles

Class 2 - Gases

Division 2.1	Flammable gases
Division 2.2	Non-flammable, non-toxic* compressed gases
Division 2.3	Gases toxic* by inhalation
Division 2.4	Corrosive gases (Canada)

Class 3 - Flammable liquids (and Combustible liquids [U.S.])

Class 4 - Flammable solids; Spontaneously combustible materials; and Dangerous when wet materials

Division 4.1	Flammable solids
Division 4.2	Spontaneously combustible materials
Division 4.3	Dangerous when wet materials

Class 5 - Oxidizers and Organic peroxides

Division 5.1	Oxidizers
Division 5.2	Organic peroxides

Class 6 - Toxic* materials and Infectious substances

Division 6.1	Toxic* materials
Division 6.2	Infectious substances

Class 7 - Radioactive materials

Class 8 - Corrosive materials

Class 9 - Miscellaneous dangerous goods

Division 9.1	Miscellaneous dangerous goods (Canada)
Division 9.2	Environmentally hazardous substances (Canada)
Division 9.3	Dangerous wastes (Canada)

* The words "poison" or "poisonous" are synonymous with the word "toxic".

NOTES

INTRODUCTION TO THE TABLE OF PLACARDS













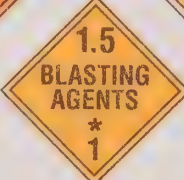









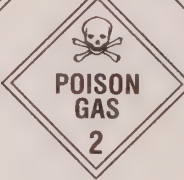

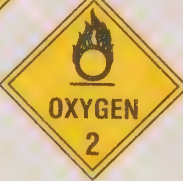




USE THIS TABLE ONLY IF YOU HAVE NOT BEEN ABLE TO IDENTIFY THE MATERIAL(S) IN TRANSPORT BY ID NUMBER OR NAME

The next two pages display the placards used on transport vehicles carrying dangerous goods. As you approach a reported or suspected dangerous goods incident involving a placarded vehicle:

- 1. Approach the incident cautiously from upwind to a point from which you can safely identify and/or read the placard or orange panel information.** If wind direction allows, consider approaching the incident from uphill. Use binoculars, if available.
- 2. Match the vehicle placard(s) with one of the placards displayed on the following pages.**
- 3. Consult the numbered guide associated with the sample placard. Use that information for now.** For example, a FLAMMABLE (Class 3) placard leads to Guide **127**. A CORROSIVE (Class 8) placard leads to Guide **153**. If multiple placards point to more than one guide, initially use the most conservative guide (i.e., the guide requiring the greatest degree of protective actions).
- 4. Remember that the guides associated with the placards provide the most significant risk and/or hazard information.**
- 5. When specific information, such as ID number or shipping name, becomes available, the more specific guide recommended for that material must be consulted.**
- 6. If Guide 111 is being used because only the DANGER/DANGEROUS placard is displayed or the nature of the spilled, leaking, or burning material is not known, as soon as possible, get more specific information concerning the material(s) involved.**

TABLE OF PLACARDS AND INITIAL

USE THIS TABLE ONLY IF MATERIALS CANNOT BE SPECIFICALLY IDENTIFIED BY

 <p>111</p> 	 <p>112</p>    
 <p>114</p>  	
 <p>112</p>  	 <p>112</p>  
 <p>121</p> 	 <p>118</p>    
 <p>122</p> 	 <p>127</p>   

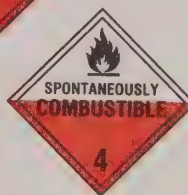
RESPONSE GUIDES TO USE ON-SCENE

USING THE SHIPPING DOCUMENT, NUMBERED PLACARD, OR ORANGE PANEL NUMBER

134



136



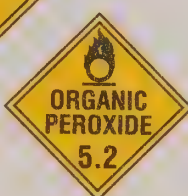
139



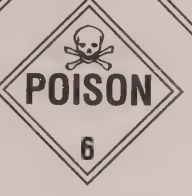
143



148



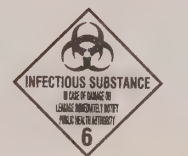
153



151



158



(Label Only)

163



153



171



Note: If an index entry is highlighted, LOOK FOR THE ID NUMBER AND THE NAME OF THE MATERIAL in the TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES (the green-bordered pages). Use this information in addition to the referenced guide.

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
—	112	Ammonium nitrate-fuel oil mixtures	—	135	p-Nitrosodiethylaniline
—	112	Blasting agent, n.o.s.	—	171	Plastic molding material
—	171	Cargo transport unit under fumigation	—	171P	Polymerizable material, stabilized with dry ice
—	154	Chemical kits (containing corrosive substances)	—	133	Wool waste, wet
—	128	Chemical kits (containing flammable liquids)	1001	116	Acetylene
—	133	Chemical kits (containing flammable solids)	1001	116	Acetylene, dissolved
—	140	Chemical kits (containing oxidizing substances)	1002	122	Air, compressed
—	153	Chemical kits (containing poisonous liquids)	1003	122	Air, refrigerated liquid (cryogenic liquid)
—	154	Chemical kits (containing poisonous solids)	1003	122	Air, refrigerated liquid (cryogenic liquid), non-pressurized
—	153	Chemical kits (containing toxic liquids)	1005	125	Ammonia, anhydrous
—	154	Chemical kits (containing toxic solids)	1005	125	Ammonia, anhydrous, liquefied
—	129	1-Chloroheptane	1005	125	Ammonia solution, with more than 50% Ammonia
—	129	1-Chlorohexane	1005	125	Anhydrous ammonia
—	152	m-Dichlorobenzene	1005	125	Anhydrous ammonia, liquefied
—	136	p-Diethylnitrosoaniline	1006	121	Argon
—	153	2-Ethyl-3-propylacrolein	1006	121	Argon, compressed
—	112	Explosive A	1008	125	Boron trifluoride
—	112	Explosive B	1008	125	Boron trifluoride, compressed
—	114	Explosive C	1009	126	Bromotrifluoromethane
—	112	Explosives, division 1.1, 1.2, 1.3, 1.5 or 1.6	1009	126	Refrigerant gas R-13B1
—	114	Explosives, division 1.4	1010	116P	Butadienes, inhibited
—	133	Fibres, animal or vegetable, burnt, wet or damp	1011	115	Butane
—	133	Fibres, vegetable, dry	1011	115	Butane mixture
—	159	Methylbromoacetone	1012	115	Butylene
			1013	120	Carbon dioxide
			1013	120	Carbon dioxide, compressed
			1014	122	Carbon dioxide and Oxygen mixture
			1014	122	Carbon dioxide and Oxygen mixture, compressed

ID No.	Guide No.	Name of Material
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1014	122	Oxygen and Carbon dioxide mixture
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1014	122	Oxygen and Carbon dioxide mixture, compressed
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1015	126	Carbon dioxide and Nitrous oxide mixture
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1015	126	Nitrous oxide and Carbon dioxide mixture
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1016	119	Carbon monoxide
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1016	119	Carbon monoxide, compressed
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1017	124	Chlorine
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1018	126	Chlorodifluoromethane
------	-----	-----------------------

1018	126	Refrigerant gas R-22
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1020	126	Chloropentafluoroethane
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1020	126	Refrigerant gas R-115
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1021	126	1-Chloro-1,2,2,2-tetrafluoroethane
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1021	126	Chlorotetrafluoroethane
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1021	126	Refrigerant gas R-124
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1022	126	Chlorotrifluoromethane
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1022	126	Refrigerant gas R-13
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1023	119	Coal gas
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1023	119	Coal gas, compressed
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1026	119	Cyanogen
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1026	119	Cyanogen, liquefied
------	-----	---------------------

1026	119	Cyanogen gas
------	-----	--------------

1027	115	Cyclopropane
------	-----	--------------

1027	115	Cyclopropane, liquefied
------	-----	-------------------------

1028	126	Dichlorodifluoromethane
------	-----	-------------------------

1028	126	Refrigerant gas R-12
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1029	126	Dichlorofluoromethane
------	-----	-----------------------

1029	126	Refrigerant gas R-21
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1030	115	1,1-Difluoroethane
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1030	115	Difluoroethane
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ID No.	Guide No.	Name of Material
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1030	115	Refrigerant gas R-152a
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1032	118	Dimethylamine, anhydrous
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1033	115	Dimethyl ether
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1035	115	Ethane
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1035	115	Ethane, compressed
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1036	118	Ethylamine
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1037	115	Ethyl chloride
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1038	115	Ethylene, refrigerated liquid (cryogenic liquid)
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1039	115	Ethyl methyl ether
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1039	115	Methyl ethyl ether
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1040	119	Ethylene oxide
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1040	119	Ethylene oxide with Nitrogen
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1041	115	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
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1041	115	Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide
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1041	115	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide
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1041	115	Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide
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1043	125	Fertilizer, ammoniating solution, with free Ammonia
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1044	126	Fire extinguishers with compressed gas
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1044	126	Fire extinguishers with liquefied gas
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1045	124	Fluorine
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1045	124	Fluorine, compressed
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1046	121	Helium
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1046	121	Helium, compressed
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D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
048	125	Hydrogen bromide, anhydrous	1061	118	Methylamine, anhydrous
049	115	Hydrogen	1062	123	Methyl bromide
049	115	Hydrogen, compressed	1063	115	Methyl chloride
050	125	Hydrogen chloride, anhydrous	1063	115	Refrigerant gas R-40
051	117	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	1064	117	Methyl mercaptan
051	117	Hydrocyanic acid, liquefied	1065	121	Neon
051	117	Hydrogen cyanide, anhydrous, stabilized	1065	121	Neon, compressed
051	117	Hydrogen cyanide, stabilized	1066	121	Nitrogen
052	125	Hydrogen fluoride, anhydrous	1066	121	Nitrogen, compressed
053	117	Hydrogen sulfide	1067	124	Dinitrogen tetroxide
053	117	Hydrogen sulfide, liquefied	1067	124	Dinitrogen tetroxide, liquefied
053	117	Hydrogen sulphide	1067	124	Nitrogen dioxide
053	117	Hydrogen sulphide, liquefied	1067	124	Nitrogen dioxide, liquefied
055	115	Isobutylene	1067	124	Nitrogen peroxide, liquid
056	121	Krypton	1067	124	Nitrogen tetroxide, liquid
056	121	Krypton, compressed	1069	125	Nitrosyl chloride
057	115	Cigarette lighter, with flammable gas	1070	122	Nitrous oxide
057	115	Flammable gas in lighter for cigars, cigarettes, etc.	1070	122	Nitrous oxide, compressed
057	115	Lighter refills (cigarettes) (flammable gas)	1071	119	Oil gas
057	115	Lighters (cigarettes) (flammable gas)	1071	119	Oil gas, compressed
058	121	Liquefied gas (nonflammable)	1072	122	Oxygen
058	121	Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air	1072	122	Oxygen, compressed
060	116P	Methylacetylene and Propadiene mixture, stabilized	1073	122	Oxygen, refrigerated liquid (cryogenic liquid)
060	116P	Propadiene and Methylacetylene mixture, stabilized	1075	115	Butane
			1075	115	Butane mixture
			1075	115	Butylene
			1075	115	Isobutane
			1075	115	Isobutane mixture
			1075	115	Isobutylene
			1075	115	Liquefied petroleum gas
			1075	115	LPG
			1075	115	Petroleum gases, liquefied

ID No.	Guide No.	Name of Material
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1075	115	Propane
1075	115	Propane mixture
1075	115	Propylene
1076	125	Diphosgene
1076	125	Phosgene
1077	115	Propylene
1078	126	Dispersant gas, n.o.s.
1078	126	Refrigerant gas, n.o.s.
1079	125	Sulfur dioxide
1079	125	Sulfur dioxide, liquefied
1079	125	Sulphur dioxide
1079	125	Sulphur dioxide, liquefied
1080	126	Sulfur hexafluoride
1080	126	Sulphur hexafluoride
1081	116P	Tetrafluoroethylene, inhibited
1082	119P	Trifluorochloroethylene
1082	119P	Trifluorochloroethylene, inhibited
1083	118	Trimethylamine, anhydrous
1085	116P	Vinyl bromide, inhibited
1086	116P	Vinyl chloride
1086	116P	Vinyl chloride, inhibited
1086	116P	Vinyl chloride, stabilized
1087	116P	Vinyl methyl ether
1087	116P	Vinyl methyl ether, inhibited
1088	127	Acetal
1089	129	Acetaldehyde
1090	127	Acetone
1091	127	Acetone oils
1092	131P	Acrolein, inhibited
1093	131P	Acrylonitrile, inhibited
1098	131	Allyl alcohol
1099	131	Allyl bromide

ID No.	Guide No.	Name of Material
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1100	131	Allyl chloride
1104	129	Amyl acetates
1105	129	Amyl alcohols
1106	132	Amylamines
1107	129	Amyl chloride
1108	127	n-Amylene
1108	127	1-Pentene
1109	129	Amyl formates
1110	127	n-Amyl methyl ketone
1110	127	Amyl methyl ketone
1110	127	Methyl amyl ketone
1111	130	Amyl mercaptan
1112	140	Amyl nitrate
1113	129	Amyl nitrite
1114	130	Benzene
1118	130	Brake fluid, hydraulic
1120	129	Butanols
1120	129	Butyl alcohol
1123	129	Butyl acetates
1125	132	n-Butylamine
1126	129	1-Bromobutane
1126	129	n-Butyl bromide
1127	130	Butyl chloride
1127	130	Chlorobutanes
1128	129	n-Butyl formate
1129	129	Butyraldehyde
1130	128	Camphor oil
1131	131	Carbon bisulfide
1131	131	Carbon bisulphide
1131	131	Carbon disulfide
1131	131	Carbon disulphide
1133	127	Adhesives (flammable)
1133	127	Cement (flammable)

D	Guide	Name of Material	ID	Guide	Name of Material
No.	No.		No.	No.	
133	127	Cement, container, linoleum, tile or wallboard, liquid	1156	127	Diethyl ketone
133	127	Cement, leather	1157	127	Diisobutyl ketone
133	127	Cement, liquid, n.o.s.	1158	132	Diisopropylamine
133	127	Cement, pyroxylin	1159	127	Diisopropyl ether
133	127	Cement, roofing, liquid	1160	129	Dimethylamine, aqueous solution
133	127	Cement, rubber	1160	129	Dimethylamine, solution
134	130	Chlorobenzene	1161	129	Dimethyl carbonate
135	131	Ethylene chlorohydrin	1162	155	Dimethyldichlorosilane
136	128	Coal tar distillates, flammable	1163	131	1,1-Dimethylhydrazine
137	128	Coal tar distillate	1163	131	Dimethylhydrazine, unsymmetrical
139	127	Coating solution	1164	130	Dimethyl sulfide
142	127	Compound, vulcanizing, liquid (flammable)	1164	130	Dimethyl sulphide
142	127	Compounds, polishing, liquid, etc. (flammable)	1165	127	Dioxane
142	127	Flammable liquid preparations, n.o.s.	1166	127	Dioxolane
143	131P	Crotonaldehyde, inhibited	1167	131P	Divinyl ether, inhibited
143	131P	Crotonaldehyde, stabilized	1168	127	Driers, paint or varnish, liquid, n.o.s.
144	128	Crotonylene	1169	127	Extracts, aromatic, liquid
145	128	Cyclohexane	1170	127	Ethanol
146	128	Cyclopentane	1170	127	Ethanol, solution
147	130	Decahydronaphthalene	1170	127	Ethyl alcohol
148	129	Diacetone alcohol	1170	127	Ethyl alcohol, solution
149	127	Butyl ethers	1171	127	Ethylene glycol monoethyl ether
149	127	Dibutyl ethers	1172	129	Ethylene glycol monoethyl ether acetate
150	132P	1,2-Dichloroethylene	1173	129	Ethyl acetate
150	132P	Dichloroethylene	1175	129	Ethylbenzene
152	130	Dichloropentanes	1176	129	Ethyl borate
153	127	Ethylene glycol diethyl ether	1177	129	2-Ethylbutyl acetate
154	132	Diethylamine	1177	129	Ethylbutyl acetate
155	127	Diethyl ether	1178	129	2-Ethylbutyraldehyde
155	127	Ethyl ether	1179	127	Ethyl butyl ether

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1180	129	Ethyl butyrate
1181	155	Ethyl chloroacetate
1182	155	Ethyl chloroformate
1183	139	Ethyl dichlorosilane
1184	129	Ethylene dichloride
1185	131P	Ethyleneimine, inhibited
1188	127	Ethylene glycol monomethyl ether
1189	129	Ethylene glycol monomethyl ether acetate
1190	129	Ethyl formate
1191	129	Ethylhexaldehydes
1191	129	Octyl aldehydes
1192	129	Ethyl lactate
1193	127	Ethyl methyl ketone
1193	127	Methyl ethyl ketone
1194	131	Ethyl nitrite, solution
1195	129	Ethyl propionate
1196	155	Ethyltrichlorosilane
1197	127	Extracts, flavoring, liquid
1197	127	Extracts, flavouring, liquid
1198	132	Formaldehyde, solution, flammable
1198	132	Formaldehyde, solutions (Formalin)
1199	132P	Furfural
1199	132P	Furfuraldehydes
1201	127	Fusel oil
1202	128	Diesel fuel
1202	128	Fuel oil
1202	128	Fuel oil, no. 1,2,4,5,6
1202	128	Gas oil
1202	128	Heating oil, light
1203	128	Gasohol

ID No.	Guide No.	Name of Material
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1203	128	Gasoline
1203	128	Motor spirit
1203	128	Petrol
1204	127	Nitroglycerin, solution in alcohol, with not more than 1% Nitroglycerin
1204	127	Spirits of Nitroglycerin, not exceeding 1 % Nitroglycerin
1206	128	Heptanes
1207	129	Hexaldehyde
1208	128	Hexanes
1208	128	Neohexane
1210	129	Ink, printer's, flammable
1210	129	Printing ink, flammable
1212	129	Isobutanol
1212	129	Isobutyl alcohol
1213	129	Isobutyl acetate
1214	132	Isobutylamine
1216	128	Isooctene
1218	130P	Isoprene, inhibited
1219	129	Isopropanol
1219	129	Isopropyl alcohol
1220	129	Isopropyl acetate
1221	132	Isopropylamine
1222	130	Isopropyl nitrate
1223	128	Kerosene
1224	127	Ketones, liquid, n.o.s.
1226	127	Cigarette lighter, with flammable liquid
1226	127	Lighters for cigars, cigarettes etc. with lighter fluid
1226	127	Lighters for cigars, cigarettes (flammable liquid)
1228	131	Mercaptan mixture, aliphatic

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
228	131	Mercaptan mixture, liquid, flammable, poisonous, n.o.s.	1251	131P	Methyl vinyl ketone, stabilized
228	131	Mercaptan mixture, liquid, flammable, toxic, n.o.s.	1255	128	Naphtha, petroleum
228	131	Mercaptan mixtures, liquid, n.o.s.	1255	128	Petroleum naphtha
228	131	Mercaptans, liquid, flammable, poisonous, n.o.s.	1256	128	Naphtha, solvent
228	131	Mercaptans, liquid, flammable, toxic, n.o.s.	1257	128	Natural gasoline
229	129	Mesityl oxide	1259	131	Nickel carbonyl
230	131	Methanol	1261	129	Nitromethane
230	131	Methyl alcohol	1262	128	Isooctane
231	129	Methyl acetate	1262	128	Octanes
232	127	Methyl acetone	1263	127	Paint (flammable)
233	129	Methylamyl acetate	1263	127	Paint related material (flammable)
234	127	Methylal	1264	129	Paraldehyde
235	132	Methylamine, aqueous solution	1265	128	Isopentane
237	129	Methyl butyrate	1265	128	n-Pentane
238	155	Methyl chloroformate	1265	128	Pentanes
239	131	Methyl chloromethyl ether	1266	127	Perfumery products, with flammable solvents
242	139	Methyldichlorosilane	1267	128	Petroleum crude oil
243	129	Methyl formate	1268	128	Petroleum distillates, n.o.s.
244	131	Methylhydrazine	1268	128	Petroleum products, n.o.s.
245	127	Methyl isobutyl ketone	1270	128	Oil, petroleum, n.o.s.
246	127P	Methyl isopropenyl ketone, inhibited	1270	128	Petroleum oil
247	129P	Methyl methacrylate monomer, inhibited	1271	128	Petroleum ether
247	129P	Methyl methacrylate monomer, uninhibited	1271	128	Petroleum spirit
248	129	Methyl propionate	1272	129	Pine oil
249	127	Methyl propyl ketone	1274	129	n-Propanol
250	155	Methyltrichlorosilane	1274	129	normal Propyl alcohol
251	131P	Methyl vinyl ketone	1274	129	Propyl alcohol, normal
			1275	129	Propionaldehyde
			1276	129	n-Propyl acetate
			1277	132	Monopropylamine
			1277	132	Propylamine

ID No.	Guide No.	Name of Material
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1278	129	1-Chloropropane
1278	129	Propyl chloride
1279	130	1,2-Dichloropropane
1279	130	Dichloropropane
1279	130	Propylene dichloride
1280	127P	Propylene oxide
1281	129	Propyl formates
1282	129	Pyridine
1286	127	Rosin oil
1287	127	Rubber solution
1288	128	Shale oil
1289	132	Sodium methylate, alcohol mixture
1289	132	Sodium methylate, solution in alcohol
1292	132	Ethyl silicate
1292	132	Tetraethyl silicate
1293	127	Tinctures, medicinal
1294	130	Toluene
1295	139	Trichlorosilane
1296	132	Triethylamine
1297	132	Trimethylamine, aqueous solution
1298	155	Trimethylchlorosilane
1299	128	Turpentine
1300	128	Turpentine substitute
1301	129P	Vinyl acetate
1301	129P	Vinyl acetate, inhibited
1302	127P	Vinyl ethyl ether
1302	127P	Vinyl ethyl ether, inhibited
1303	129P	Vinylidene chloride, inhibited
1304	127P	Vinyl isobutyl ether
1304	127P	Vinyl isobutyl ether, inhibited
1305	155	Vinyltrichlorosilane

ID No.	Guide No.	Name of Material
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1305	155	Vinyltrichlorosilane, inhibited
1306	129	Wood preservatives, liquid
1307	130	Xylenes
1308	170	Zirconium metal, liquid, suspension
1308	170	Zirconium suspended in a flammable liquid
1308	170	Zirconium suspended in a liquid (flammable)
1309	170	Aluminum powder, coated
1310	113	Ammonium picrate, wetted with not less than 10% water
1312	133	Borneol
1313	133	Calcium resinate
1314	133	Calcium resinate, fused
1318	133	Cobalt resinate, precipitated
1320	113	Dinitrophenol, wetted with not less than 15% water
1321	113	Dinitrophenolates, wetted with not less than 15% water
1322	113	Dinitroresorcinol, wetted with not less than 15% water
1323	170	Ferrocium
1324	133	Film
1324	133	Films, nitrocellulose base
1325	133	Air bag inflators
1325	133	Air bag modules
1325	133	Antimony sulfide, solid
1325	133	Antimony sulphide, solid
1325	133	Burnt cotton, not picked
1325	133	Cosmetics, n.o.s.
1325	133	Drugs, n.o.s.
1325	133	Flammable solid, n.o.s.
1325	133	Flammable solid, organic, n.o.s.

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
325	133	Fusee (rail or highway)	1338	133	Phosphorus, amorphous
325	133	Medicines, flammable, solid, n.o.s.	1338	133	Phosphorus, amorphous, red
325	133	N-Methyl-N'-Nitro-N- Nitrosoguanidine	1338	133	Red phosphorus
325	133	Pyroxylin plastic, rod, sheet, roll, tube or scrap	1338	133	Red phosphorus, amorphous
325	133	Smokeless powder for small arms	1339	139	Phosphorus heptasulfide, free from yellow and white Phosphorus
326	170	Hafnium powder, wetted with not less than 25% water	1339	139	Phosphorus heptasulphide, free from yellow and white Phosphorus
327	133	Bhusa, wet, damp or contaminated with oil	1340	139	Phosphorus pentasulfide, free from yellow and white Phosphorus
327	133	Hay, wet, damp or contaminated with oil	1340	139	Phosphorus pentasulphide, free from yellow and white Phosphorus
327	133	Straw, wet, damp or contaminated with oil	1341	139	Phosphorus sesquisulfide, free from yellow and white Phosphorus
328	133	Hexamethylenetetramine	1341	139	Phosphorus sesquisulphide, free from yellow and white Phosphorus
328	133	Hexamine	1343	139	Phosphorus trisulfide, free from yellow and white Phosphorus
330	133	Manganese resinate	1343	139	Phosphorus trisulphide, free from yellow and white Phosphorus
331	133	Matches, "strike anywhere"	1344	113	Picric acid, wet, with not less than 10% water
332	133	Metaldehyde	1344	113	Trinitrophenol, wetted with not less than 30% water
333	170	Cerium, slabs, ingots or rods	1345	133	Rubber scrap, powdered or granulated
334	133	Naphthalene, crude	1345	133	Rubber shoddy, powdered or granulated
334	133	Naphthalene, refined	1346	170	Silicon powder, amorphous
336	113	Nitroguanidine (Picrite), wetted with not less than 20% water	1347	113	Silver picrate, wetted with not less than 30% water
336	113	Nitroguanidine, wetted with not less than 20% water			
336	113	Picrite, wetted			
337	113	Nitrostarch, wet, with not less than 30% alcohol or solvent			
337	113	Nitrostarch, wetted with not less than 20% water			
337	113	Nitrostarch, wetted with not less than 30% solvent			

ID No.	Guide No.	Name of Material
1348	113	Sodium dinitro-o-cresolate, wetted with not less than 15% water
1348	113	Sodium dinitro-ortho-cresolate, wetted
1349	113	Sodium picramate, wetted with not less than 20% water
1350	133	Sulfur
1350	133	Sulphur
1352	170	Titanium powder, wetted with not less than 25% water
1353	133	Fabrics impregnated with weakly nitrated Nitrocellulose, n.o.s.
1353	133	Fibers impregnated with weakly nitrated Nitrocellulose, n.o.s.
1353	133	Fibres impregnated with weakly nitrated Nitrocellulose, n.o.s.
1353	133	Toe puffs, nitrocellulose base
1354	113	Trinitrobenzene, wetted with not less than 30% water
1355	113	Trinitrobenzoic acid, wetted with not less than 30% water
1356	113	TNT, wetted with not less than 30% water
1356	113	Trinitrotoluene, wetted with not less than 30% water
1357	113	Urea nitrate, wetted with not less than 20% water
1358	170	Zirconium metal, powder, wet
1358	170	Zirconium powder, wetted with not less than 25% water
1360	139	Calcium phosphide
1361	133	Carbon, animal or vegetable origin
1361	133	Charcoal
1361	133	Charcoal, briquettes
1361	133	Charcoal, shell

ID No.	Guide No.	Name of Material
1361	133	Charcoal, wood, ground, crushed, granulated or pulverized
1361	133	Charcoal screenings, made from "Pinon" wood
1361	133	Charcoal screenings, other than "Pinon" wood screenings
1362	133	Carbon, activated
1363	135	Copra
1364	133	Cotton waste, oily
1365	133	Cotton
1365	133	Cotton, wet
1366	135	Diethylzinc
1369	135	p-Nitrosodimethylaniline
1370	135	Dimethylzinc
1372	133	Fiber, animal or vegetable, n.o.s., burnt, wet or damp
1372	133	Fibers
1373	133	Fabrics, animal, synthetic or vegetable, n.o.s., with oil
1373	133	Fiber, animal, synthetic or vegetable, n.o.s., with oil
1373	133	Fibres, animal, synthetic or vegetable, n.o.s., with oil
1374	133	Fish meal, unstabilized
1374	133	Fish meal containing less than 6% or more than 12% water
1374	133	Fish scrap, unstabilized
1374	133	Fish scrap containing less than 6% or more than 12% water
1376	135	Iron oxide, spent
1376	135	Iron sponge, spent
1378	170	Metal catalyst, wetted
1379	133	Paper, unsaturated oil treated
1380	135	Pentaborane

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
381	136	Phosphorus, white, dry or under water or in solution	1389	138	Alkali metal amalgam
381	136	Phosphorus, yellow, dry or under water or in solution	1390	139	Alkali metal amides
381	136	White phosphorus, dry	1391	138	Alkali metal dispersion
381	136	White phosphorus, in solution	1391	138	Alkaline earth metal dispersion
381	136	White phosphorus, under water	1392	138	Alkaline earth metal amalgam
381	136	Yellow phosphorus, dry	1393	138	Alkaline earth metal alloy, n.o.s.
381	136	Yellow phosphorus, in solution	1394	138	Aluminum carbide
381	136	Yellow phosphorus, under water	1395	139	Aluminum ferrosilicon powder
382	135	Potassium sulfide, anhydrous	1396	138	Aluminum powder, uncoated
382	135	Potassium sulfide, with less than 30% water of crystallization	1397	139	Aluminum phosphide
382	135	Potassium sulfide, with less than 30% water of hydration	1398	138	Aluminum silicon powder, uncoated
382	135	Potassium sulphide, anhydrous	1400	138	Barium
382	135	Potassium sulphide, with less than 30% water of crystallization	1401	138	Calcium
382	135	Potassium sulphide, with less than 30% water of hydration	1401	138	Calcium metal, crystalline
383	135	Aluminum powder, pyrophoric	1402	138	Calcium carbide
383	135	Pyrophoric alloy, n.o.s.	1403	138	Calcium cyanamide, with more than 0.1% Calcium carbide
383	135	Pyrophoric metal, n.o.s.	1404	138	Calcium hydride
384	135	Sodium dithionite	1405	138	Calcium silicide
384	135	Sodium hydrosulfite	1406	138	Calcium silicon
384	135	Sodium hydrosulphite	1407	138	Caesium
385	135	Sodium sulfide, anhydrous	1407	138	Cesium
385	135	Sodium sulfide, with less than 30% water of crystallization	1408	139	Ferrosilicon
385	135	Sodium sulphide, anhydrous	1409	138	Hydrides, metal, n.o.s.
385	135	Sodium sulphide, with less than 30% water of crystallization	1409	138	Metal hydrides, water-reactive, n.o.s.
386	135	Seed cake, with more than 1.5% oil and not more than 11% moisture	1410	138	Lithium aluminum hydride
			1411	138	Lithium aluminum hydride, ethereal
			1412	139	Lithium amide
			1413	138	Lithium borohydride
			1414	138	Lithium hydride
			1415	138	Lithium

ID No.	Guide No.	Name of Material
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1417	138	Lithium silicon
1418	138	Magnesium alloys powder
1418	138	Magnesium powder
1419	139	Magnesium aluminum phosphide
1420	138	Potassium, metal alloys
1420	138	Potassium, metal liquid alloy
1421	138	Alkali metal alloy, liquid, n.o.s.
1422	138	Potassium sodium alloys
1422	138	Sodium potassium alloys
1423	138	Rubidium
1423	138	Rubidium metal
1426	138	Sodium borohydride
1427	138	Sodium hydride
1428	138	Sodium
1431	138	Sodium methylate
1431	138	Sodium methylate, dry
1432	139	Sodium phosphide
1433	139	Stannic phosphides
1435	138	Zinc ashes
1435	138	Zinc dross
1435	138	Zinc residue
1435	138	Zinc skimmings
1436	138	Zinc dust
1436	138	Zinc powder
1437	138	Zirconium hydride
1438	140	Aluminum nitrate
1439	141	Ammonium dichromate
1442	143	Ammonium perchlorate
1444	140	Ammonium persulfate
1444	140	Ammonium persulphate
1445	141	Barium chlorate
1445	141	Barium chlorate, wet
1446	141	Barium nitrate

ID No.	Guide No.	Name of Material
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1447	141	Barium perchlorate
1448	141	Barium permanganate
1449	141	Barium peroxide
1450	141	Bromates, inorganic, n.o.s.
1451	140	Caesium nitrate
1451	140	Cesium nitrate
1452	140	Calcium chlorate
1453	140	Calcium chlorite
1454	140	Calcium nitrate
1455	140	Calcium perchlorate
1456	140	Calcium permanganate
1457	140	Calcium peroxide
1458	140	Borate and Chlorate mixtures
1458	140	Chlorate and Borate mixtures
1459	140	Chlorate and Magnesium chloride mixture
1459	140	Magnesium chloride and Chlorate mixture
1461	140	Chlorate, n.o.s., wet
1461	140	Chlorates, inorganic, n.o.s.
1462	143	Chlorites, inorganic, n.o.s.
1463	141	Chromic acid, solid
1463	141	Chromic acid mixture, dry
1463	141	Chromium trioxide, anhydrous
1465	140	Didymium nitrate
1466	140	Ferric nitrate
1467	143	Guanidine nitrate
1469	141	Lead nitrate
1470	141	Lead perchlorate
1470	141	Lead perchlorate, solid
1470	141	Lead perchlorate, solution
1471	140	Lithium hypochlorite, dry
1471	140	Lithium hypochlorite mixture

Guide Name of Material No. No.			ID Guide Name of Material No. No.		
471	140	Lithium hypochlorite mixtures, dry	1489	140	Potassium perchlorate
472	143	Lithium peroxide	1490	140	Potassium permanganate
473	140	Magnesium bromate	1491	144	Potassium peroxide
474	140	Magnesium nitrate	1492	140	Potassium persulfate
475	140	Magnesium perchlorate	1492	140	Potassium persulphate
476	140	Magnesium peroxide	1493	140	Silver nitrate
477	140	Ammonium sulfate nitrate	1494	141	Sodium bromate
477	140	Ammonium sulphate nitrate	1495	140	Sodium chlorate
477	140	Nitrate, n.o.s.	1496	143	Sodium chlorite
477	140	Nitrates, inorganic, n.o.s.	1498	140	Sodium nitrate
479	140	Compound, tree or weed killing, solid (oxidizer)	1499	140	Potassium nitrate and Sodium nitrate mixture
479	140	Cosmetics, n.o.s.	1499	140	Sodium nitrate and Potassium nitrate mixture
479	140	Drugs, n.o.s.	1500	140	Sodium nitrite
479	140	Medicines, oxidizing substances, solid, n.o.s.	1502	140	Sodium perchlorate
479	140	Oxidizing solid, n.o.s.	1503	140	Sodium permanganate
479	140	Oxidizing substances, solid, n.o.s.	1504	144	Sodium peroxide
481	140	Perchlorate, n.o.s.	1505	140	Sodium persulfate
481	140	Perchlorates, inorganic, n.o.s.	1505	140	Sodium persulphate
482	140	Permanganate, n.o.s.	1506	143	Strontium chlorate
482	140	Permanganates, inorganic, n.o.s.	1506	143	Strontium chlorate, solid
483	140	Peroxides, inorganic, n.o.s.	1506	143	Strontium chlorate, solution
484	140	Potassium bromate	1507	140	Strontium nitrate
485	140	Potassium chlorate	1508	140	Strontium perchlorate
486	140	Potassium nitrate	1509	143	Strontium peroxide
487	140	Potassium nitrate and Sodium nitrite mixture	1510	143	Tetranitromethane
487	140	Sodium nitrite and Potassium nitrate mixtures	1511	140	Urea hydrogen peroxide
487	140	Sodium nitrite mixture	1511	140	Urea peroxide
488	140	Potassium nitrite	1512	140	Zinc ammonium nitrite
			1513	140	Zinc chlorate
			1514	140	Zinc nitrate
			1515	140	Zinc permanganate

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1516	143	Zinc peroxide
1517	113	Zirconium picramate, wetted with not less than 20% water
1541	155	Acetone cyanohydrin, stabilized
1544	151	Alkaloids, solid, n.o.s. (poisonous)
1544	151	Alkaloid salts, solid, n.o.s. (poisonous)
1545	155	Allyl isothiocyanate, inhibited
1545	155	Allyl isothiocyanate, stabilized
1546	151	Ammonium arsenate
1547	153	Aniline
1548	153	Aniline hydrochloride
1549	157	Antimony compound, inorganic, n.o.s.
1549	157	Antimony compound, inorganic, solid, n.o.s.
1549	157	Antimony tribromide, solid
1549	157	Antimony tribromide, solution
1549	157	Antimony trifluoride, solid
1549	157	Antimony trifluoride, solution
1550	151	Antimony lactate
1551	151	Antimony potassium tartrate
1553	154	Arsenic acid, liquid
1554	154	Arsenic acid, solid
1555	151	Arsenic bromide
1556	152	Arsenic compound, liquid, n.o.s.
1556	152	Arsenic compound, liquid, n.o.s., inorganic
1556	152	Methyldichloroarsine
1556	152	Phenyldichloroarsine
1557	152	Arsenic compound, solid, n.o.s.
1557	152	Arsenic compound, solid, n.o.s., inorganic
1557	152	Arsenic iodide, solid

1557	152	Arsenic sulfide
1557	152	Arsenic sulphide
1557	152	Arsenic trisulfide
1557	152	Arsenic trisulphide
1558	152	Arsenic
1559	151	Arsenic pentoxide
1560	157	Arsenic chloride
1560	157	Arsenic trichloride
1561	151	Arsenic trioxide
1562	152	Arsenical dust
1564	154	Barium compound, n.o.s.
1565	157	Barium cyanide
1566	154	Beryllium chloride
1566	154	Beryllium compound, n.o.s.
1566	154	Beryllium fluoride
1567	134	Beryllium powder
1569	131	Bromoacetone
1570	152	Brucine
1571	113	Barium azide, wetted with not less than 50% water
1572	151	Cacodylic acid
1573	151	Calcium arsenate
1574	151	Calcium arsenate and Calcium arsenite mixture, solid
1574	151	Calcium arsenite, solid
1574	151	Calcium arsenite and Calcium arsenate mixture, solid
1575	157	Calcium cyanide
1577	153	Chlorodinitrobenzenes
1577	153	Dinitrochlorobenzene
1578	152	Chloronitrobenzenes
1578	152	Chloronitrobenzenes, liquid
1578	152	Chloronitrobenzenes, solid
1578	152	Nitrochlorobenzenes, liquid

Guide Name of Material			ID Guide Name of Material		
No.	No.		No.	No.	
78	152	Nitrochlorobenzenes, solid	1595	156	Dimethyl sulphate
79	153	4-Chloro-o-toluidine hydrochloride	1596	153	Dinitroanilines
80	154	Chloropicrin	1597	152	Dinitrobenzenes
81	123	Chloropicrin and Methyl bromide mixture	1598	153	Dinitro-o-cresol
81	123	Methyl bromide and Chloropicrin mixtures	1599	153	Dinitrophenol, solution
81	123	Methyl bromide and more than 2% Chloropicrin mixture, liquid	1600	152	Dinitrotoluenes, molten
82	119	Chloropicrin and Methyl chloride mixture	1601	151	Disinfectant, solid, poisonous, n.o.s.
82	119	Methyl chloride and Chloropicrin mixtures	1601	151	Disinfectant, solid, toxic, n.o.s.
83	154	Chloropicrin, absorbed	1601	151	Disinfectants, solid, n.o.s. (poisonous)
83	154	Chloropicrin mixture, n.o.s.	1602	151	Dye, liquid, poisonous, n.o.s.
84	151	Cocculus	1602	151	Dye, liquid, toxic, n.o.s.
85	151	Copper acetoarsenite	1602	151	Dye intermediate, liquid, poisonous, n.o.s.
86	151	Copper arsenite	1602	151	Dye intermediate, liquid, toxic, n.o.s.
87	151	Copper cyanide	1603	155	Ethyl bromoacetate
88	157	Cyanides, inorganic, n.o.s.	1604	132	Ethylenediamine
88	157	Cyanides, inorganic, solid, n.o.s.	1605	154	Ethylene dibromide
89	125	Cyanogen chloride, inhibited	1606	151	Ferric arsenate
90	153	Dichloroanilines	1607	151	Ferric arsenite
90	153	Dichloroanilines, liquid	1608	151	Ferrous arsenate
90	153	Dichloroanilines, solid	1610	159	Halogenated irritating liquid, n.o.s.
91	152	o-Dichlorobenzene	1611	151	Hexaethyl tetraphosphate
92	152	p-Dichlorobenzene	1611	151	Hexaethyl tetraphosphate, liquid
93	160	Dichloromethane	1611	151	Hexaethyl tetraphosphate, solid
93	160	Methylene chloride	1612	123	Hexaethyl tetraphosphate and compressed gas mixture
94	152	Diethyl sulfate	1613	154	Hydrocyanic acid, aqueous solution, with less than 5% Hydrogen cyanide
94	152	Diethyl sulphate	1613	154	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide
95	156	Dimethyl sulfate			

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1613	154	Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide
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1614	131	Hydrogen cyanide, anhydrous, stabilized (absorbed)
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1614	131	Hydrogen cyanide, stabilized (absorbed)
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1616	151	Lead acetate
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1617	151	Lead arsenates
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1618	151	Lead arsenites
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1620	151	Lead cyanide
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1621	151	London purple
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1622	151	Magnesium arsenate
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1623	151	Mercuric arsenate
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1624	154	Mercuric chloride
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1625	141	Mercuric nitrate
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1626	157	Mercuric potassium cyanide
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1627	141	Mercurous nitrate
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1628	151	Mercurous sulfate
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1628	151	Mercurous sulphate
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1629	151	Mercury acetate
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1630	151	Mercury ammonium chloride
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1631	154	Mercury benzoate
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1633	151	Mercury bisulfate
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1633	151	Mercury bisulphate
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1634	154	Mercuric bromide
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1634	154	Mercurous bromide
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1634	154	Mercury bromides
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1636	154	Mercuric cyanide
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1636	154	Mercury cyanide
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1637	151	Mercury gluconate
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1638	151	Mercury iodide
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1639	151	Mercury nucleate
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1640	151	Mercury oleate
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ID No.	Guide No.	Name of Material
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1641	151	Mercury oxide
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1642	151	Mercuric oxycyanide
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1642	151	Mercury oxycyanide, desensitized
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1643	151	Mercury potassium iodide
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1644	151	Mercury salicylate
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1645	151	Mercuric sulfate
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1645	151	Mercuric sulphate
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1645	151	Mercury sulfate
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1645	151	Mercury sulphate
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1646	151	Mercury thiocyanate
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1647	151	Ethylene dibromide and Methyl bromide mixture, liquid
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1647	151	Methyl bromide and Ethylene dibromide mixture, liquid
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1648	131	Acetonitrile
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1648	131	Methyl cyanide
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1649	131	Motor fuel anti-knock compound
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1649	131	Motor fuel anti-knock mixture
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1649	131	Tetraethyl lead, liquid
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1650	153	beta-Naphthylamine
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1650	153	Naphthylamine (beta)
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1651	153	Naphthylthiourea
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1652	153	Naphthylurea
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1653	151	Nickel cyanide
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1654	151	Nicotine
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1655	151	Nicotine compound, solid, n.o.s.
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1655	151	Nicotine preparation, solid, n.o.s.
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1656	151	Nicotine hydrochloride
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1656	151	Nicotine hydrochloride, solution
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1657	151	Nicotine salicylate
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1658	151	Nicotine sulfate, solid
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1658	151	Nicotine sulfate, solution
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Guide Name of Material			ID Guide Name of Material		
No.			No.		
58	151	Nicotine sulphate, solid	1690	154	Sodium fluoride, solution
58	151	Nicotine sulphate, solution	1691	151	Strontium arsenite
59	151	Nicotine tartrate	1692	151	Strychnine
60	124	Nitric oxide	1692	151	Strychnine salts
60	124	Nitric oxide, compressed	1693	159	Irritating agent, n.o.s.
61	153	Nitroanilines	1693	159	ORM-A, n.o.s.
62	152	Nitrobenzene	1693	159	Tear gas devices
63	153	Nitrophenols	1693	159	Tear gas substance, liquid, n.o.s.
64	152	Nitrotoluenes	1693	159	Tear gas substance, solid, n.o.s.
64	152	Nitrotoluenes, liquid	1694	159	Bromobenzyl cyanides
64	152	Nitrotoluenes, solid	1695	131	Chloroacetone, stabilized
65	152	Nitroxylenes	1697	153	Chloroacetophenone
65	152	Nitroxylol	1697	153	Chloroacetophenone, liquid
69	151	Pentachloroethane	1697	153	Chloroacetophenone, solid
70	157	Perchloromethyl mercaptan	1698	154	Diphenylamine chloroarsine
71	153	Phenol, solid	1699	151	Diphenylchloroarsine
72	151	Phenylcarbylamine chloride	1699	151	Diphenylchloroarsine, liquid
73	153	Phenylenediamines	1699	151	Diphenylchloroarsine, solid
74	151	Phenylmercuric acetate	1700	159	Tear gas grenades
77	151	Potassium arsenate	1701	152	Xylol bromide
78	154	Potassium arsenite	1702	151	1,1,2,2-Tetrachloroethane
79	157	Potassium cuprocyanide	1702	151	Tetrachloroethane
80	157	Potassium cyanide	1703	123	Tetraethyl dithiopyrophosphate and gases, in solution
83	151	Silver arsenite	1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures
84	151	Silver cyanide	1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)
85	151	Sodium arsenate	1703	123	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)
86	154	Sodium arsenite, aqueous solution			
87	153	Sodium azide			
88	152	Sodium cacodylate			
89	157	Sodium cyanide			
90	154	Sodium fluoride			
90	154	Sodium fluoride, solid			

ID No.	Guide No.	Name of Material
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1704	153	Tetraethyl dithiopyrophosphate
1704	153	Tetraethyl dithiopyrophosphate, mixture, dry or liquid
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)
1705	123	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)
1707	151	Thallium compound, n.o.s.
1707	151	Thallium sulfate, solid
1707	151	Thallium sulphate, solid
1708	153	Toluidines
1708	153	Toluidines, liquid
1708	153	Toluidines, solid
1709	151	2,4-Toluenediamine
1709	151	Toluenediamine
1709	151	2,4-Toluylenediamine
1710	160	Trichloroethylene
1711	153	Xylidines
1712	151	Zinc arsenate
1712	151	Zinc arsenate and Zinc arsenite mixture
1712	151	Zinc arsenite
1712	151	Zinc arsenite and Zinc arsenate mixture
1713	151	Zinc cyanide
1714	139	Zinc phosphide
1715	137	Acetic anhydride
1716	156	Acetyl bromide
1717	132	Acetyl chloride
1718	153	Acid butyl phosphate

ID No.	Guide No.	Name of Material
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1718	153	Butyl acid phosphate
1719	154	Alkaline liquid, n.o.s.
1719	154	Caustic alkali liquid, n.o.s.
1722	155	Allyl chlorocarbonate
1722	155	Allyl chloroformate
1723	132	Allyl iodide
1724	155	Allyltrichlorosilane, stabilized
1725	137	Aluminum bromide, anhydrous
1726	137	Aluminum chloride, anhydrous
1727	154	Ammonium bifluoride, solid
1727	154	Ammonium hydrogendifluoride, solid
1727	154	Ammonium hydrogen fluoride, solid
1728	155	Amyltrichlorosilane
1729	156	Anisoyl chloride
1730	157	Antimony pentachloride, liquid
1731	157	Antimony pentachloride, solution
1732	157	Antimony pentafluoride
1733	157	Antimony trichloride
1733	157	Antimony trichloride, liquid
1733	157	Antimony trichloride, solid
1733	157	Antimony trichloride, solution
1736	137	Benzoyl chloride
1737	156	Benzyl bromide
1738	156	Benzyl chloride
1739	137	Benzyl chloroformate
1740	154	Bifluorides, n.o.s.
1740	154	Hydrogendifluorides, n.o.s.
1741	125	Boron trichloride
1742	155	Boron trifluoride acetic acid complex

Guide Name of Material o. No.			ID Guide Name of Material No. No.		
743	156	Boron trifluoride propionic acid complex	1759	154	Ferrous chloride, solid
744	154	Bromine	1759	154	Medicines, corrosive, solid, n.o.s.
744	154	Bromine, solution	1759	154	Stannous chloride, solid
745	144	Bromine pentafluoride	1760	154	Acid, liquid, n.o.s.
746	144	Bromine trifluoride	1760	154	Aluminum phosphate, solution
747	155	Butyltrichlorosilane	1760	154	Aluminum sulfate, solution
748	140	Calcium hypochlorite, dry	1760	154	Aluminum sulphate, solution
748	140	Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	1760	154	2-(2-Aminoethoxy)ethanol
749	124	Chlorine trifluoride	1760	154	Aminopropyldiethanolamine
750	153	Chloroacetic acid, liquid	1760	154	N-Aminopropylmorpholine
750	153	Chloroacetic acid, solution	1760	154	Chemical kit
751	153	Chloroacetic acid, solid	1760	154	Compound, rust preventing (corrosive)
752	156	Chloroacetyl chloride	1760	154	Compound, rust removing (corrosive)
753	156	Chlorophenyltrichlorosilane	1760	154	Compound, tree or weed killing, liquid (corrosive)
754	137	Chlorosulfonic acid	1760	154	Compound, vulcanizing, liquid (corrosive)
754	137	Chlorosulfonic acid and Sulfur trioxide mixture	1760	154	Compounds, cleaning, liquid (corrosive)
754	137	Chlorosulphonic acid	1760	154	Corrosive liquid, n.o.s.
754	137	Chlorosulphonic acid and Sulphur trioxide mixture	1760	154	Cosmetics, liquid, n.o.s.
754	137	Sulfur trioxide and Chlorosulfonic acid mixture	1760	154	2,2-Dichloropropionic acid
754	137	Sulphur trioxide and Chlorosulphonic acid mixture	1760	154	Drugs, liquid, n.o.s.
755	154	Chromic acid, solution	1760	154	Ferrous chloride, solution
756	154	Chromic fluoride, solid	1760	154	Flame retardant compound, liquid (corrosive)
757	154	Chromic fluoride, solution	1760	154	Hexanoic acid
758	137	Chromium oxychloride	1760	154	Isopentanoic acid
759	154	Corrosive solid, n.o.s.	1760	154	Medicines, corrosive, liquid, n.o.s.
759	154	Cosmetics, solid, n.o.s.	1760	154	Morpholine, aqueous mixture
759	154	Drugs, solid, n.o.s.	1760	154	Nitric acid, 40% or less

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1760	154	ORM-B, n.o.s.
1760	154	Paint (corrosive)
1760	154	Paint related material (corrosive)
1760	154	Textile treating compound or mixture, liquid (corrosive)
1760	154	Titanium sulfate, solution
1760	154	Titanium sulphate, solution
1761	154	Cupriethylenediamine, solution
1762	156	Cyclohexenyltrichlorosilane
1763	156	Cyclohexyltrichlorosilane
1764	153	Dichloroacetic acid
1765	156	Dichloroacetyl chloride
1766	156	Dichlorophenyltrichlorosilane
1767	155	Diethyldichlorosilane
1768	154	Difluorophosphoric acid, anhydrous
1769	156	Diphenyldichlorosilane
1770	153	Diphenylmethyl bromide
1771	156	Dodecyltrichlorosilane
1773	157	Ferric chloride
1773	157	Ferric chloride, anhydrous
1774	154	Fire extinguisher charges, corrosive liquid
1775	154	Fluoboric acid
1775	154	Fluoroboric acid
1776	154	Fluorophosphoric acid, anhydrous
1777	137	Fluorosulfonic acid
1777	137	Fluorosulphonic acid
1778	154	Fluorosilicic acid
1778	154	Fluosilicic acid
1778	154	Hydrofluorosilicic acid
1778	154	Hydrofluosilicic acid

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1779	153	Formic acid
1780	156	Fumaryl chloride
1781	156	Hexadecyltrichlorosilane
1782	154	Hexafluorophosphoric acid
1783	153	Hexamethylenediamine, solution
1784	156	Hexyltrichlorosilane
1786	157	Hydrofluoric acid and Sulfuric acid mixture
1786	157	Hydrofluoric acid and Sulphuric acid mixture
1786	157	Sulfuric acid and Hydrofluoric acid mixtures
1786	157	Sulphuric acid and Hydrofluoric acid mixtures
1787	154	Hydriodic acid
1787	154	Hydriodic acid, solution
1788	154	Hydrobromic acid
1788	154	Hydrobromic acid, solution
1789	157	Compound, cleaning liquid (containing Hydrochloric (muriatic) acid)
1789	157	Hydrochloric acid
1789	157	Hydrochloric acid, mixture
1789	157	Hydrochloric acid, solution
1789	157	Muriatic acid
1790	157	Compound, cleaning liquid (containing Hydrofluoric acid)
1790	157	Etching acid, liquid, n.o.s.
1790	157	Hydrofluoric acid
1790	157	Hydrofluoric acid, solution
1791	154	Hypochlorite solution
1791	154	Hypochlorite solution, with more than 5% available Chlorine
1792	157	Iodine monochloride

Guide Name of Material o. No.			ID Guide Name of Material No. No.		
93	153	Isopropyl acid phosphate	1814	154	Caustic potash, solution
94	154	Lead sulfate, with more than 3% free acid	1814	154	Potassium hydroxide, solution
94	154	Lead sulphate, with more than 3% free acid	1815	132	Propionyl chloride
96	157	Nitrating acid mixture	1816	155	Propyltrichlorosilane
98	157	Aqua regia	1817	137	Pyrosulfuryl chloride
98	157	Nitrohydrochloric acid	1817	137	Pyrosulphuryl chloride
99	156	Nonyltrichlorosilane	1818	156	Silicon tetrachloride
00	156	Octadecyltrichlorosilane	1819	154	Sodium aluminate, solution
01	156	Octyltrichlorosilane	1821	154	Sodium bisulfate, solid
02	140	Perchloric acid, with not more than 50% acid	1821	154	Sodium bisulphate, solid
03	153	Phenolsulfonic acid, liquid	1821	154	Sodium hydrogen sulfate, solid
03	153	Phenolsulphonic acid, liquid	1821	154	Sodium hydrogen sulphate, solid
04	156	Phenyltrichlorosilane	1823	154	Caustic soda, bead
05	154	Phosphoric acid	1823	154	Caustic soda, flake
06	137	Phosphorus pentachloride	1823	154	Caustic soda, granular
07	137	Phosphoric anhydride	1823	154	Caustic soda, solid
07	137	Phosphorus pentoxide	1823	154	Sodium hydroxide, dry
08	137	Phosphorus tribromide	1823	154	Sodium hydroxide, bead
09	137	Phosphorus trichloride	1823	154	Sodium hydroxide, flake
10	137	Phosphorus oxychloride	1823	154	Sodium hydroxide, granular
11	154	Potassium bifluoride	1823	154	Sodium hydroxide, solid
11	154	Potassium hydrogendifluoride	1824	154	Caustic soda, solution
11	154	Potassium hydrogen fluoride, solution	1824	154	Sodium hydroxide, solution
12	154	Potassium fluoride	1825	157	Sodium monoxide
13	154	Battery	1826	157	Nitrating acid, spent
13	154	Caustic potash, dry, solid	1826	157	Nitrating acid mixture, spent
13	154	Potassium hydroxide, dry, solid	1827	137	Stannic chloride, anhydrous
13	154	Potassium hydroxide, flake	1827	137	Tin tetrachloride
13	154	Potassium hydroxide, solid	1828	137	Sulfur chlorides
14	154	Caustic potash, liquid	1828	137	Sulphur chlorides
			1829	137	Sulfur trioxide
			1829	137	Sulfur trioxide, inhibited
			1829	137	Sulfur trioxide, stabilized

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1829	137	Sulfur trioxide, uninhibited
1829	137	Sulphur trioxide
1829	137	Sulphur trioxide, inhibited
1829	137	Sulphur trioxide, stabilized
1829	137	Sulphur trioxide, uninhibited
1830	137	Sulfuric acid
1830	137	Sulfuric acid, with more than 51% acid
1830	137	Sulphuric acid
1830	137	Sulphuric acid, with more than 51% acid
1831	137	Oleum
1831	137	Oleum, with less than 30% free Sulfur trioxide
1831	137	Oleum, with less than 30% free Sulphur trioxide
1831	137	Oleum, with not less than 30% free Sulfur trioxide
1831	137	Oleum, with not less than 30% free Sulphur trioxide
1831	137	Sulfuric acid, fuming
1831	137	Sulfuric acid, fuming, with less than 30% free Sulfur trioxide
1831	137	Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide
1831	137	Sulphuric acid, fuming
1831	137	Sulphuric acid, fuming, with less than 30% free Sulphur trioxide
1831	137	Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide
1832	137	Sulfuric acid, spent
1832	137	Sulphuric acid, spent
1833	154	Sulfurous acid
1833	154	Sulphurous acid

ID No.	Guide No.	Name of Material
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1834	137	Sulfuryl chloride
1834	137	Sulphuryl chloride
1835	153	Tetramethylammonium hydroxide
1836	137	Thionyl chloride
1837	157	Thiophosphoryl chloride
1838	137	Titanium tetrachloride
1839	153	Trichloroacetic acid
1840	154	Zinc chloride, solution
1841	171	Acetaldehyde ammonia
1843	141	Ammonium dinitro-o-cresolate
1845	120	Carbon dioxide, solid
1845	120	Dry ice
1846	151	Carbon tetrachloride
1847	153	Potassium sulfide, hydrated, with not less than 30% water of crystallization
1847	153	Potassium sulfide, hydrated, with not less than 30% water of hydration
1847	153	Potassium sulphide, hydrated, with not less than 30% water of crystallization
1847	153	Potassium sulphide, hydrated, with not less than 30% water of hydration
1848	132	Propionic acid
1849	153	Sodium sulfide, hydrated, with not less than 30% water
1849	153	Sodium sulphide, hydrated, with not less than 30% water
1851	151	Medicine, liquid, poisonous, n.o.s.
1851	151	Medicine, liquid, toxic, n.o.s.
1854	135	Barium alloys, pyrophoric
1855	135	Calcium, metal and alloys, pyrophoric

Guide Name of Material o. No.			ID Guide Name of Material No. No.		
355	135	Calcium, pyrophoric	1888	151	Chloroform
355	135	Calcium alloys, pyrophoric	1889	157	Cyanogen bromide
356	133	Rags, oily	1891	131	Ethyl bromide
358	126	Hexafluoropropylene	1892	151	Ethyldichloroarsine
358	126	Refrigerant gas R-1216	1894	151	Phenylmercuric hydroxide
359	125	Silicon tetrafluoride	1895	151	Phenylmercuric nitrate
359	125	Silicon tetrafluoride, compressed	1897	160	Perchloroethylene
360	116P	Vinyl fluoride, inhibited	1897	160	Tetrachloroethylene
362	129	Ethyl crotonate	1898	156	Acetyl iodide
363	128	Fuel, aviation, turbine engine	1902	153	Di-(2-ethylhexyl)phosphoric acid
364	128	Gas drips, hydrocarbon	1902	153	Diisooctyl acid phosphate
365	131	n-Propyl nitrate	1903	153	Disinfectant, liquid, corrosive, n.o.s.
366	127	Resin solution	1903	153	Disinfectants, corrosive, liquid, n.o.s.
367	133	Cigarettes, self-lighting	1905	154	Selenic acid
368	134	Decaborane	1906	153	Acid, sludge
369	138	Magnesium	1906	153	Sludge acid
369	138	Magnesium, in pellets, turnings or ribbons	1907	154	Soda lime, with more than 4% Sodium hydroxide
369	138	Magnesium alloys, with more than 50% Magnesium, in pellets, turnings or ribbons	1908	154	Chlorite solution
369	138	Magnesium scrap	1908	154	Chlorite solution, with more than 5% available Chlorine
370	138	Potassium borohydride	1908	154	Sodium chlorite, solution, with more than 5% available Chlorine
371	170	Titanium hydride	1910	157	Calcium oxide
372	141	Lead dioxide	1911	119	Diborane
372	141	Lead peroxide	1911	119	Diborane, compressed
373	143	Perchloric acid, with more than 50% but not more than 72% acid	1911	119	Diborane mixtures
384	157	Barium oxide	1912	115	Methyl chloride and Methylene chloride mixture
385	153	Benzidine	1912	115	Methylene chloride and Methyl chloride mixture
386	156	Benzylidene chloride			
387	160	Bromochloromethane			

ID No.	Guide No.	Name of Material
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1913	120	Neon, refrigerated liquid (cryogenic liquid)
1914	130	Butyl propionates
1915	127	Cyclohexanone
1916	152	2,2'-Dichlorodiethyl ether
1916	152	Dichloroethyl ether
1917	129P	Ethyl acrylate, inhibited
1918	131	Cumene
1918	131	Isopropylbenzene
1919	129P	Methyl acrylate, inhibited
1920	128	Nonanes
1921	131P	Propyleneimine, inhibited
1922	132	Pyrrolidine
1923	135	Calcium dithionite
1923	135	Calcium hydrosulfite
1923	135	Calcium hydrosulphite
1928	135	Methyl magnesium bromide in Ethyl ether
1929	135	Potassium dithionite
1929	135	Potassium hydrosulfite
1929	135	Potassium hydrosulphite
1931	171	Zinc dithionite
1931	171	Zinc hydrosulfite
1931	171	Zinc hydrosulphite
1932	135	Zirconium scrap
1935	157	Cyanide solution, n.o.s.
1938	156	Bromoacetic acid
1938	156	Bromoacetic acid, solid
1938	156	Bromoacetic acid, solution
1939	137	Phosphorus oxybromide
1939	137	Phosphorus oxybromide, solid
1940	153	Thioglycolic acid
1941	159	Dibromodifluoromethane

ID No.	Guide No.	Name of Material
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1942	140	Ammonium nitrate, with not more than 0.2% combustible substances
1942	140	Ammonium nitrate, with organic coating
1944	133	Matches, safety
1945	133	Matches, wax "vesta"
1950	126	Aerosol dispensers
1950	126	Aerosols
1951	120	Argon, refrigerated liquid (cryogenic liquid)
1952	126	Carbon dioxide and Ethylene oxide mixtures, with not more than 6% Ethylene oxide
1952	126	Carbon dioxide and Ethylene oxide mixtures, with not more than 9% Ethylene oxide
1952	126	Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide
1952	126	Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)
1953	119	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)
1953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)

D Guide No. No.		Name of Material	ID Guide No. No.		Name of Material
953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)
953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)
953	119	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)
953	119	Compressed gas, poisonous, flammable, n.o.s.	1953	119	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)
953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	1953	119	Liquefied gas, flammable, toxic, n.o.s.
953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)
953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)
953	119	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)
953	119	Compressed gas, toxic, flammable, n.o.s.	1953	119	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)
953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	1953	119	Poisonous gas, flammable, n.o.s.
953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	1953	119	Poisonous liquid, flammable, n.o.s.
953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	1954	115	Compressed gas, flammable, n.o.s.
953	119	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	1954	115	Dispersant gas, n.o.s. (flammable)
953	119	Liquefied gas, flammable, poisonous, n.o.s.	1954	115	Insecticide gas, flammable, n.o.s.
			1954	115	Liquefied gas, flammable, n.o.s.
			1954	115	Refrigerant gas, n.o.s. (flammable)

ID No.	Guide No.	Name of Material
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1954	115	Refrigerating machines, containing flammable, liquefied gas
1954	115	Refrigerating machines, containing flammable, non-poisonous, non-corrosive, liquefied gas
1955	123	Chloropicrin and non-flammable, non-liquefied compressed gas mixture
1955	123	Compressed gas, poisonous, n.o.s.
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
1955	123	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
1955	123	Compressed gas, toxic, n.o.s.
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)
1955	123	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)
1955	123	Liquefied gas, poisonous, n.o.s.
1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)
1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)

ID No.	Guide No.	Name of Material
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1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
1955	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
1955	123	Liquefied gas, toxic, n.o.s.
1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)
1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
1955	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
1955	123	Methyl bromide and nonflammable, nonliquefied compressed gas mixture
1955	123	Organic phosphate compound mixed with compressed gas
1955	123	Organic phosphate mixed with compressed gas
1955	123	Organic phosphorus compound mixed with compressed gas
1955	123	Poisonous gas, n.o.s.
1955	123	Poisonous liquid, n.o.s.
1956	126	Accumulators, pressurized, pneumatic or hydraulic
1956	126	Compressed gas, n.o.s.
1956	126	Hexafluoropropylene oxide
1956	126	Liquefied gas, n.o.s.
1956	126	Water pump system
1957	115	Deuterium
1957	115	Deuterium, compressed
1958	126	1,2-Dichloro-1,1,2,2-tetrafluoroethane
1958	126	Dichlorotetrafluoroethane
1958	126	Refrigerant gas R-114

D	Guide	Name of Material
No.	No.	

959	116P	1,1-Difluoroethylene
959	116P	Refrigerant gas R-1132a
960	115	Engine starting fluid
961	115	Ethane, refrigerated liquid
961	115	Ethane-Propane mixture, refrigerated liquid
961	115	Propane-Ethane mixture, refrigerated liquid
962	116P	Ethylene
962	116P	Ethylene, compressed
963	120	Helium, refrigerated liquid (cryogenic liquid)
964	115	Hydrocarbon gas, compressed, n.o.s.
964	115	Hydrocarbon gas mixture, compressed, n.o.s.
965	115	Hydrocarbon gas, liquefied, n.o.s.
965	115	Hydrocarbon gas mixture, liquefied, n.o.s.
966	115	Hydrogen, refrigerated liquid (cryogenic liquid)
967	123	Insecticide, liquefied gas, containing Poison A or Poison B material
967	123	Insecticide gas, poisonous, n.o.s.
967	123	Insecticide gas, toxic, n.o.s.
967	123	Parathion and compressed gas mixture
968	126	Insecticide, liquefied gas
968	126	Insecticide gas, n.o.s.
969	115	Isobutane
969	115	Isobutane mixture
970	120	Krypton, refrigerated liquid (cryogenic liquid)

ID	Guide	Name of Material
No.	No.	

1971	115	Methane
1971	115	Methane, compressed
1971	115	Natural gas, compressed
1972	115	Liquefied natural gas (cryogenic liquid)
1972	115	LNG (cryogenic liquid)
1972	115	Methane, refrigerated liquid (cryogenic liquid)
1972	115	Natural gas, refrigerated liquid (cryogenic liquid)
1973	126	Chlorodifluoromethane and Chloropentafluoroethane mixture
1973	126	Chloropentafluoroethane and Chlorodifluoromethane mixture
1973	126	Refrigerant gas R-502
1974	126	Bromochlorodifluoromethane
1974	126	Chlorodifluorobromomethane
1974	126	Refrigerant gas R-12B1
1975	124	Dinitrogen tetroxide and Nitric oxide mixture
1975	124	Nitric oxide and Dinitrogen tetroxide mixture
1975	124	Nitric oxide and Nitrogen dioxide mixture
1975	124	Nitric oxide and Nitrogen tetroxide mixture
1975	124	Nitrogen dioxide and Nitric oxide mixture
1975	124	Nitrogen tetroxide and Nitric oxide mixture
1976	126	Octafluorocyclobutane
1976	126	Refrigerant gas RC-318
1977	120	Nitrogen, refrigerated liquid (cryogenic liquid)

ID No.	Guide No.	Name of Material
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1978	115	Propane
1978	115	Propane mixture
1979	121	Rare gases mixture
1979	121	Rare gases mixture, compressed
1980	122	Helium-Oxygen mixture
1980	122	Oxygen and Rare gases mixture
1980	122	Oxygen and Rare gases mixture, compressed
1980	122	Rare gases and Oxygen mixture
1980	122	Rare gases and Oxygen mixture, compressed
1981	121	Nitrogen and Rare gases mixture
1981	121	Nitrogen and Rare gases mixture, compressed
1981	121	Rare gases and Nitrogen mixture
1981	121	Rare gases and Nitrogen mixture, compressed
1982	126	Refrigerant gas R-14, compressed
1982	126	Tetrafluoromethane
1982	126	Tetrafluoromethane, compressed
1983	126	1-Chloro-2,2,2-trifluoroethane
1983	126	Chlorotrifluoroethane
1983	126	Refrigerant gas R-133a
1984	126	Refrigerant gas R-23
1984	126	Trifluoromethane
1986	131	Alcohols, flammable, poisonous, n.o.s.
1986	131	Alcohols, flammable, toxic, n.o.s.
1986	131	Alcohols, poisonous, n.o.s.
1986	131	Alcohols, toxic, n.o.s.
1986	131	Denatured alcohol (toxic)
1986	131	Propargyl alcohol

ID No.	Guide No.	Name of Material
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1987	127	Alcohols, n.o.s.
1987	127	Denatured alcohol
1988	131	Aldehydes, flammable, poisonous, n.o.s.
1988	131	Aldehydes, flammable, toxic, n.o.s.
1988	131	Aldehydes, poisonous, n.o.s.
1988	131	Aldehydes, toxic, n.o.s.
1989	129	Aldehydes, n.o.s.
1989	129	Benzaldehyde
1990	129	Benzaldehyde
1991	131P	Chloroprene, inhibited
1992	131	Flammable liquid, poisonous, n.o.s.
1992	131	Flammable liquid, toxic, n.o.s.
1993	128	Combustible liquid, n.o.s.
1993	128	Compound, tree or weed killing, liquid (flammable)
1993	128	Compounds, cleaning, liquid (flammable)
1993	128	Cosmetics, n.o.s.
1993	128	Diesel fuel
1993	128	Disinfectant, liquid, n.o.s.
1993	128	Drugs, n.o.s.
1993	128	Ethyl nitrate
1993	128	Flammable liquid, n.o.s.
1993	128	Fuel oil
1993	128	Heater for refrigerator car, liquid fuel type
1993	128	Medicines, flammable, liquid, n.o.s.
1993	128	Refrigerating machine
1994	131	Iron pentacarbonyl
1999	130	Asphalt
1999	130	Asphalt, cut back

ID No.	Guide No.	Name of Material
1999	130	Tars, liquid
2000	133	Celluloid, in blocks, rods, rolls, sheets, tubes, etc., except scrap
2001	133	Cobalt naphthenates, powder
2002	135	Celluloid, scrap
2003	135	Metal alkyls, n.o.s.
2003	135	Metal aryls, n.o.s.
2004	135	Magnesium diamide
2005	135	Magnesium diphenyl
2006	135	Plastic, nitrocellulose-based, spontaneously combustible, n.o.s.
2006	135	Plastics, nitrocellulose-based, self-heating, n.o.s.
2008	135	Zirconium powder, dry
2009	135	Zirconium, dry, finished sheets, strips or coiled wire
2010	138	Magnesium hydride
2011	139	Magnesium phosphide
2012	139	Potassium phosphide
2013	139	Strontium phosphide
2014	140	Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)
2015	143	Hydrogen peroxide, aqueous solution, stabilized, with more than 60% Hydrogen peroxide
2015	143	Hydrogen peroxide, stabilized
2016	151	Ammunition, poisonous, non-explosive
2016	151	Ammunition, toxic, non-explosive
2017	159	Ammunition, tear-producing, non-explosive

ID No.	Guide No.	Name of Material
2017	159	Grenade, tear gas
2018	152	Chloroanilines, solid
2019	152	Chloroanilines, liquid
2020	153	Chlorophenols, solid
2020	153	Trichlorophenol
2021	153	Chlorophenols, liquid
2022	153	Cresylic acid
2022	153	Mining reagent, liquid
2023	131P	1-Chloro-2,3-epoxypropane
2023	131P	Epichlorohydrin
2024	151	Mercury compound, liquid, n.o.s.
2025	151	Mercury compound, solid, n.o.s.
2026	151	Phenylmercuric compound, n.o.s.
2027	151	Sodium arsenite, solid
2028	153	Bombs, smoke, non-explosive, with corrosive liquid, without initiating device
2029	132	Hydrazine, anhydrous
2029	132	Hydrazine, aqueous solutions, with more than 64% Hydrazine
2030	153	Hydrazine, aqueous solution, with not less than 37% but not more than 64% Hydrazine
2030	153	Hydrazine, aqueous solutions, with not more than 64% Hydrazine
2030	153	Hydrazine hydrate
2031	157	Nitric acid, other than red fuming
2031	157	Nitric acid, other than red fuming, with more than 70% Nitric acid
2031	157	Nitric acid, other than red fuming, with not more than 70% Nitric acid
2032	157	Nitric acid, fuming

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2032	157	Nitric acid, red fuming	2055	128P	Styrene monomer, inhibited
2033	154	Potassium monoxide	2056	127	Tetrahydrofuran
2034	115	Hydrogen and Methane mixture, compressed	2057	128	Tripropylene
2034	115	Methane and Hydrogen mixture, compressed	2058	129	Valeraldehyde
2035	115	Refrigerant gas R-143a	2059	127	Collodion
2035	115	1,1,1-Trifluoroethane	2059	127	Nitrocellulose, block, wet, with not less than 25% alcohol
2035	115	Trifluoroethane, compressed	2059	127	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% alcohol or solvent
2036	121	Xenon	2059	127	Nitrocellulose, solution, flammable
2036	121	Xenon, compressed	2059	127	Nitrocellulose, solution, in a flammable liquid
2037	115	Gas cartridges	2067	140	Ammonium nitrate fertilizers
2037	115	Receptacles, small, containing gas	2068	140	Ammonium nitrate fertilizers, with Calcium carbonate
2038	152	Dinitrotoluenes	2069	140	Ammonium nitrate fertilizers, with Ammonium sulfate
2038	152	Dinitrotoluenes, liquid	2069	140	Ammonium nitrate fertilizers, with Ammonium sulphate
2038	152	Dinitrotoluenes, solid	2069	140	Ammonium nitrate mixed fertilizers
2044	115	2,2-Dimethylpropane	2070	143	Ammonium nitrate fertilizers, with Phosphate or Potash
2045	129	Isobutyl aldehyde	2071	140	Ammonium nitrate fertilizer, with not more than 0.4% combustible material
2045	129	Isobutyraldehyde	2071	140	Ammonium nitrate fertilizers
2046	130	Cymenes	2072	140	Ammonium nitrate fertilizer, n.o.s.
2047	132	Dichloropropenes	2072	140	Ammonium nitrate fertilizers
2048	129	Dicyclopentadiene	2073	125	Ammonia, solution, with more than 35% but not more than 50% Ammonia
2049	130	Diethylbenzene	2074	153P	Acrylamide
2050	127	Diisobutylene, isomeric compounds			
2051	132	2-Dimethylaminoethanol			
2051	132	Dimethylethanolamine			
2052	128	Dipentene			
2053	129	Methylamyl alcohol			
2053	129	Methyl isobutyl carbinol			
2053	129	M.I.B.C.			
2054	132	Morpholine			
2054	132	Morpholine, aqueous mixture			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2075	153	Chloral, anhydrous, inhibited	2099	146	tert-Butyl monoperoxymaleate
2076	153	Cresols	2102	145	Di-tert-butyl peroxide
2077	153	alpha-Naphthylamine	2103	146	tert-Butyl peroxyisopropyl carbonate
2077	153	Naphthylamine (alpha)	2104	145	tert-Butyl peroxyisononanoate
2078	156	Toluene diisocyanate	2104	145	tert-Butyl peroxy-3,5,5-trimethylhexanoate
2079	154	Diethylenetriamine	2106	146	Di-(tert-butylperoxy)phthalate
2080	145	Acetyl acetone peroxide	2107	145	Di-(tert-butylperoxy)phthalate
2081	147	Acetyl benzoyl peroxide	2108	145	Di-(tert-butylperoxy)phthalate
2082	148	Acetyl cyclohexanesulfonyl peroxide	2110	148	tert-Butyl peroxy-pivalate
2082	148	Acetyl cyclohexanesulphonyl peroxide	2111	146	2,2-Di-(tert-butylperoxy)butane
2083	148	Acetyl cyclohexanesulfonyl peroxide	2112	145	1,3-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,4-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures
2083	148	Acetyl cyclohexanesulphonyl peroxide	2112	145	1,4-Di-(2-tert-butylperoxy-isopropyl)benzene and 1,3-Di-(2-tert-butylperoxy-isopropyl)benzene mixtures
2084	148	Acetyl peroxide	2113	146	p-Chlorobenzoyl peroxide
2085	146	Benzoyl peroxide	2114	145	p-Chlorobenzoyl peroxide
2087	146	Benzoyl peroxide	2115	145	p-Chlorobenzoyl peroxide
2088	146	Benzoyl peroxide	2116	147	Cumene hydroperoxide
2089	145	Benzoyl peroxide	2118	147	Cyclohexanone peroxide, not more than 72% in solution
2090	146	Benzoyl peroxide	2119	147	Cyclohexanone peroxide, not more than 90%, with not less than 10% water
2091	145	tert-Butyl cumene peroxide	2120	148	Decanoyl peroxide
2091	145	tert-Butyl cumyl peroxide	2121	145	Dicumyl peroxide
2091	145	tert-Butyl isopropyl benzene hydroperoxide	2122	148	Di-(2-ethylhexyl)-peroxydicarbonate
2092	147	tert-Butyl hydroperoxide, not more than 80% in Di-tert-butyl peroxide and/or solvent	2123	148	Di-(2-ethylhexyl)-peroxydicarbonate
2093	147	tert-Butyl hydroperoxide	2124	145	Lauroyl peroxide
2094	147	tert-Butyl hydroperoxide	2125	147	p-Menthane hydroperoxide
2095	146	tert-Butyl peroxyacetate			
2096	146	tert-Butyl peroxyacetate			
2097	146	tert-Butyl peroxybenzoate			
2098	145	tert-Butyl peroxybenzoate			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2126	147	Methyl isobutyl ketone peroxide	2150	148	Di-(sec-butyl)peroxydicarbonate
2128	148	Isononanoyl peroxide	2151	148	Di-(sec-butyl)peroxydicarbonate
2129	148	Caprylyl peroxide	2152	148	Dicyclohexyl peroxydicarbonate
2129	148	Caprylyl peroxide, solution	2153	148	Dicyclohexyl peroxydicarbonate
2129	148	Octanoyl peroxide	2154	148	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate
2130	148	Pelargonyl peroxide	2155	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
2131	147	Peracetic acid, solution	2156	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane
2131	147	Peroxyacetic acid, solution	2157	148	2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane
2132	148	Propionyl peroxide	2158	146	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3
2133	148	Isopropyl percarbonate, unstabilized	2159	145	2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3, with not more than 52% Peroxide in inert solid
2133	148	Isopropyl peroxydicarbonate	2160	145	1,1,3,3-Tetramethylbutyl hydroperoxide
2134	148	Isopropyl peroxydicarbonate	2161	148	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate
2135	146	Succinic acid peroxide	2162	147	Pinane hydroperoxide
2136	145	Tetralin hydroperoxide	2163	148	Diacetone alcohol peroxides
2137	146	2,4-Dichlorobenzoyl peroxide	2164	148	Dicetyl peroxydicarbonate
2138	145	2,4-Dichlorobenzoyl peroxide	2165	146	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane
2139	145	2,4-Dichlorobenzoyl peroxide	2166	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane
2140	146	n-Butyl-4,4-di-(tert-butylperoxy)valerate	2167	145	3,3,6,6,9,9-Hexamethyl-1,2,4,5-tetraoxacyclononane
2141	145	n-Butyl-4,4-di-(tert-butylperoxy)valerate	2168	145	2,2-Di-(4,4-di-tert-butylperoxycyclohexyl)propane
2142	148	tert-Butyl peroxyisobutyrate	2169	148	Butyl peroxydicarbonate
2143	148	tert-Butyl peroxy-2-ethylhexanoate	2170	148	Butyl peroxydicarbonate
2144	148	tert-Butyl peroxydiethylacetate	2171	145	Diisopropylbenzene hydroperoxide
2145	146	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane			
2146	145	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane			
2147	145	1,1-Di-(tert-butylperoxy)-3,3,5-trimethyl cyclohexane			
2148	145	Di-(1-hydroxycyclohexyl)-peroxide			
2149	148	Dibenzyl peroxydicarbonate			

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2172	146	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	2193	126	Hexafluoroethane
2173	145	2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	2193	126	Hexafluoroethane, compressed
2174	146	2,5-Dimethyl-2,5-dihydroperoxy hexane, not more than 82% with water	2193	126	Refrigerant gas R-116, compressed
2174	146	Dimethylhexane dihydroperoxide, with 18% or more water	2194	125	Selenium hexafluoride
2175	148	Diethyl peroxydicarbonate	2195	125	Tellurium hexafluoride
2176	148	Di-n-propyl peroxydicarbonate	2196	125	Tungsten hexafluoride
2177	148	tert-Butyl peroxyneodecanoate	2197	125	Hydrogen iodide, anhydrous
2178	146	2,2-Dihydroperoxypropane	2198	125	Phosphorus pentafluoride
2179	146	1,1-Di-(tert-butylperoxy)-cyclohexane	2198	125	Phosphorus pentafluoride, compressed
2180	146	1,1-Di-(tert-butylperoxy)-cyclohexane	2199	119	Phosphine
2182	148	Diisobutryl peroxide	2200	116P	Propadiene, inhibited
2183	145	tert-Butyl peroxycrotonate	2201	122	Nitrous oxide, refrigerated liquid
2184	146	Ethyl-3,3-di-(tert-butylperoxy)butyrate	2202	117	Hydrogen selenide, anhydrous
2185	145	Ethyl-3,3-di-(tert-butylperoxy)butyrate, not more than 77% in solution	2203	116	Silane
2186	125	Hydrogen chloride, refrigerated liquid	2203	116	Silane, compressed
2187	120	Carbon dioxide, refrigerated liquid	2204	119	Carbonyl sulfide
2188	119	Arsine	2204	119	Carbonyl sulphide
2189	119	Dichlorosilane	2205	153	Adiponitrile
2190	124	Oxygen difluoride	2206	155	Isocyanate solution, poisonous, n.o.s.
2190	124	Oxygen difluoride, compressed	2206	155	Isocyanate solution, toxic, n.o.s.
2191	123	Sulfuryl fluoride	2206	155	Isocyanate solutions, n.o.s.
2191	123	Sulphuryl fluoride	2206	155	Isocyanates, n.o.s.
2192	119	Germane	2206	155	Isocyanates, poisonous, n.o.s.
			2206	155	Isocyanates, toxic, n.o.s.
			2207	155	Isocyanate solutions, n.o.s. (toxic)
			2207	155	Isocyanates, n.o.s. (toxic)
			2208	140	Bleaching powder
			2208	140	Calcium hypochlorite mixture, dry, with more than 10% but not more than 39% available Chlorine

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2209	132	Formaldehyde, solutions (Formalin) (corrosive)
2210	135	Maneb
2210	135	Maneb preparation, with not less than 60% Maneb
2210	135	Pesticide, water-reactive
2211	133	Polymeric beads, expandable
2211	133	Polystyrene beads, expandable
2212	171	Asbestos
2212	171	Asbestos, blue
2212	171	Asbestos, brown
2212	171	Blue asbestos
2212	171	Brown asbestos
2213	133	Paraformaldehyde
2214	156	Phthalic anhydride
2215	156	Maleic acid
2215	156	Maleic anhydride
2216	171	Fish meal, stabilized
2216	171	Fish meal containing 6% to 12% water
2216	171	Fish scrap, stabilized
2216	171	Fish scrap containing 6% to 12% water
2217	135	Seed cake, with not more than 1.5% oil and not more than 11% moisture
2218	132P	Acrylic acid, inhibited
2219	129	Allyl glycidyl ether
2222	127	Anisole
2224	152	Benzonitrile
2225	156	Benzenesulfonyl chloride
2225	156	Benzenesulphonyl chloride
2226	156	Benzotrichloride
2227	129P	n-Butyl methacrylate
2227	129P	n-Butyl methacrylate, inhibited

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2228	153	Butylphenols, liquid
2229	153	Butylphenols, solid
2232	153	Chloroacetaldehyde
2232	153	2-Chloroethanal
2233	152	Chloroanisidines
2234	130	Chlorobenzotrifluorides
2235	153	Chlorobenzyl chlorides
2236	156	3-Chloro-4-methylphenyl isocyanate
2237	153	Chloronitroanilines
2238	130	Chlorotoluenes
2239	153	Chlorotoluidines
2239	153	Chlorotoluidines, liquid
2239	153	Chlorotoluidines, solid
2240	154	Chromosulfuric acid
2240	154	Chromosulphuric acid
2241	128	Cycloheptane
2242	128	Cycloheptene
2243	130	Cyclohexyl acetate
2244	129	Cyclopentanol
2245	127	Cyclopentanone
2246	128	Cyclopentene
2247	128	n-Decane
2248	132	Di-n-butylamine
2249	153	Dichlorodimethyl ether, symmetrical
2250	156	Dichlorophenyl isocyanates
2251	127P	Bicyclo[2.2.1]hepta-2,5-diene
2251	127P	Bicyclo[2.2.1]hepta-2,5-diene, inhibited
2251	127P	Dicycloheptadiene
2251	127P	2,5-Norbornadiene
2251	127P	2,5-Norbornadiene, inhibited
2252	127	1,2-Dimethoxyethane

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2253	153	N,N-Dimethylaniline
2254	133	Matches, fusee
2255	146	Organic peroxides, samples, n.o.s.
2255	146	Polyester resin kit
2256	130	Cyclohexene
2257	138	Potassium
2257	138	Potassium, metal
2258	132	1,2-Propylenediamine
2258	132	1,3-Propylenediamine
2259	153	Triethylenetetramine
2260	132	Tripropylamine
2261	153	Xylenols
2262	156	Dimethylcarbamoyl chloride
2263	128	Dimethylcyclohexanes
2264	132	Dimethylcyclohexylamine
2265	129	N,N-Dimethylformamide
2266	132	Dimethyl-N-propylamine
2267	156	Dimethyl chlorothiophosphate
2267	156	Dimethyl phosphorochloridothioate
2267	156	Dimethylthiophosphoryl chloride
2269	153	3,3'-Iminodipropylamine
2270	132	Ethylamine, aqueous solution, with not less than 50% but not more than 70% Ethylamine
2271	127	Ethyl amyl ketone
2272	153	N-Ethylaniline
2273	153	2-Ethylaniline
2274	153	N-Ethyl-N-benzylaniline
2275	129	2-Ethylbutanol
2276	132	2-Ethylhexylamine
2277	129P	Ethyl methacrylate
2277	129P	Ethyl methacrylate, inhibited

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2278	128	n-Heptene
2279	151	Hexachlorobutadiene
2280	153	Hexamethylenediamine, solid
2281	156	Hexamethylene diisocyanate
2282	129	Hexanols
2283	130P	Isobutyl methacrylate
2283	130P	Isobutyl methacrylate, inhibited
2284	131	Isobutyronitrile
2285	156	Isocyanatobenzotrifluorides
2286	128	Pentamethylheptane
2287	128	Isoheptene
2288	128	Isohexene
2289	153	Isophoronediamine
2290	156	IPDI
2290	156	Isophorone diisocyanate
2291	151	Lead chloride
2291	151	Lead compound, soluble, n.o.s.
2291	151	Lead fluoborate
2293	127	4-Methoxy-4-methyl-pentan-2-one
2294	153	N-Methylaniline
2295	155	Methyl chloroacetate
2296	128	Methylcyclohexane
2297	127	Methylcyclohexanone
2298	128	Methylcyclopentane
2299	155	Methyl dichloroacetate
2300	153	2-Methyl-5-ethylpyridine
2301	127	2-Methylfuran
2302	127	5-Methylhexan-2-one
2303	128	Isopropenylbenzene
2304	133	Naphthalene, molten
2305	153	Nitrobenzenesulfonic acid
2305	153	Nitrobenzenesulphonic acid

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2306	152	Nitrobenzotrifluorides
2307	152	3-Nitro-4-chlorobenzotrifluoride
2308	157	Nitrosylsulfuric acid
2308	157	Nitrosylsulphuric acid
2309	128P	Octadiene
2310	127	Pentan-2,4-dione
2310	127	2,4-Pentanedione
2310	127	Pentane-2,4-dione
2311	153	Phenetidines
2312	153	Phenol, molten
2313	130	Picolines
2315	171	Articles containing Polychlorinated biphenyls (PCB)
2315	171	PCB
2315	171	Polychlorinated biphenyls
2316	157	Sodium cuprocyanide, solid
2317	157	Sodium cuprocyanide, solution
2318	135	Sodium hydrosulfide, solid, with less than 25% water of crystallization
2318	135	Sodium hydrosulfide, with less than 25% water of crystallization
2318	135	Sodium hydrosulphide, solid, with less than 25% water of crystallization
2318	135	Sodium hydrosulphide, with less than 25% water of crystallization
2319	128	Terpene hydrocarbons, n.o.s.
2320	153	Tetraethylenepentamine
2321	153	Trichlorobenzenes, liquid
2322	152	Trichlorobutene
2323	129	Triethyl phosphite

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2324	128	Triisobutylene
2325	129	1,3,5-Trimethylbenzene
2326	153	Trimethylcyclohexylamine
2327	153	Trimethylhexamethylenediamines
2328	156	Trimethylhexamethylene diisocyanate
2329	129	Trimethyl phosphite
2330	128	Undecane
2331	154	Zinc chloride, anhydrous
2332	129	Acetaldehyde oxime
2333	131	Allyl acetate
2334	131	Allylamine
2335	131	Allyl ethyl ether
2336	131	Allyl formate
2337	131	Phenyl mercaptan
2338	131	Benzotrifluoride
2339	130	2-Bromobutane
2340	130	2-Bromoethyl ethyl ether
2341	130	1-Bromo-3-methylbutane
2342	130	Bromomethylpropanes
2343	130	2-Bromopentane
2344	132	2-Bromopropane
2344	132	Bromopropanes
2345	132	3-Bromopropyne
2346	127	Butanedione
2346	127	Diacetyl
2347	130	Butyl mercaptan
2348	129P	Butyl acrylate
2348	129P	Butyl acrylates, inhibited
2350	127	Butyl methyl ether
2351	129	Butyl nitrites
2352	127P	Butyl vinyl ether, inhibited
2353	132	Butyryl chloride

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2354	131	Chloromethyl ethyl ether	2384	127	Di-n-propyl ether
2356	129	2-Chloropropane	2384	127	Dipropyl ether
2357	132	Cyclohexylamine	2385	129	Ethyl isobutyrate
2358	128P	Cyclooctatetraene	2386	132	1-Ethylpiperidine
2359	132	Diallylamine	2387	130	Fluorobenzene
2360	131P	Diallyl ether	2388	130	Fluorotoluenes
2361	132	Diisobutylamine	2389	127	Furan
2362	130	1,1-Dichloroethane	2390	129	2-Iodobutane
2363	130	Ethyl mercaptan	2391	129	Iodomethylpropanes
2364	127	n-Propyl benzene	2392	129	Iodopropanes
2366	127	Diethyl carbonate	2393	132	Isobutyl formate
2367	130	alpha-Methylvaleraldehyde	2394	129	Isobutyl propionate
2367	130	Methyl valeraldehyde (alpha)	2395	132	Isobutyryl chloride
2368	127	alpha-Pinene	2396	131P	Methacrylaldehyde
2368	127	Pinene (alpha)	2396	131P	Methacrylaldehyde, inhibited
2369	152	Ethylene glycol monobutyl ether	2397	127	3-Methylbutan-2-one
2370	128	1-Hexene	2398	127	Methyl tert-butyl ether
2371	128	Isopentenes	2399	132	1-Methylpiperidine
2372	129	1,2-Di-(dimethylamino)ethane	2400	130	Methyl isovalerate
2373	127	Diethoxymethane	2401	132	Piperidine
2374	127	3,3-Diethoxypropene	2402	130	Isopropyl mercaptan
2375	129	Diethyl sulfide	2402	130	Propanethiols
2375	129	Diethyl sulphide	2402	130	Propyl mercaptan
2376	127	2,3-Dihdropyran	2403	129P	Isopropenyl acetate
2377	127	1,1-Dimethoxyethane	2404	131	Propionitrile
2378	131	2-Dimethylaminoacetonitrile	2405	129	Isopropyl butyrate
2379	132	1,3-Dimethylbutylamine	2406	131	Isopropyl isobutyrate
2380	127	Dimethyldiethoxysilane	2407	155	Isopropyl chloroformate
2381	130	Dimethyl disulfide	2409	129	Isopropyl propionate
2381	130	Dimethyl disulphide	2410	129	1,2,3,6-Tetrahydropyridine
2382	131	1,2-Dimethylhydrazine	2410	129	1,2,5,6-Tetrahydropyridine
2382	131	Dimethylhydrazine, symmetrical	2411	131	Butyronitrile
2383	132	Dipropylamine	2412	129	Tetrahydrothiophene

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2413	128	Tetrapropyl orthotitanate
2414	130	Thiophene
2416	129	Trimethyl borate
2417	125	Carbonyl fluoride
2417	125	Carbonyl fluoride, compressed
2418	125	Sulfur tetrafluoride
2418	125	Sulphur tetrafluoride
2419	116	Bromotrifluoroethylene
2420	125	Hexafluoroacetone
2421	124	Nitrogen trioxide
2422	126	Octafluorobut-2-ene
2422	126	Refrigerant gas R-1318
2424	126	Octafluoropropane
2424	126	Refrigerant gas R-218
2426	140	Ammonium nitrate, liquid (hot concentrated solution)
2427	140	Potassium chlorate, aqueous solution
2427	140	Potassium chlorate, solution
2428	140	Sodium chlorate, aqueous solution
2429	140	Calcium chlorate, aqueous solution
2429	140	Calcium chlorate, solution
2430	153	Alkyl phenols, solid, n.o.s. (including C2-C12 homologues)
2431	153	Anisidines
2431	153	Anisidines, liquid
2431	153	Anisidines, solid
2432	153	N,N-Diethylaniline
2433	152	Chloronitrotoluenes
2433	152	Chloronitrotoluenes, liquid
2433	152	Chloronitrotoluenes, solid

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2434	156	Dibenzilyldichlorosilane
2435	156	Ethylphenyldichlorosilane
2436	129	Thioacetic acid
2437	156	Methylphenyldichlorosilane
2438	132	Trimethylacetyl chloride
2439	154	Sodium bifluoride, solid
2439	154	Sodium bifluoride, solution
2439	154	Sodium hydrogendifluoride
2439	154	Sodium hydrogen fluoride
2440	154	Stannic chloride, pentahydrate
2440	154	Tin tetrachloride, pentahydrate
2441	135	Titanium trichloride, pyrophoric
2441	135	Titanium trichloride mixture, pyrophoric
2442	156	Trichloroacetyl chloride
2443	137	Titanium tetrachloride and Vanadium oxytrichloride, mixture
2443	137	Vanadium oxytrichloride
2443	137	Vanadium oxytrichloride and Titanium tetrachloride, mixture
2444	137	Vanadium tetrachloride
2445	135	Lithium alkyls
2446	153	Nitrocresols
2447	136	Phosphorus, white, molten
2447	136	White phosphorus, molten
2447	136	Yellow phosphorus, molten
2448	133	Sulfur, molten
2448	133	Sulphur, molten
2449	154	Ammonium oxalate
2449	154	Oxalates, water soluble
2451	122	Nitrogen trifluoride
2451	122	Nitrogen trifluoride, compressed

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2452	116P	Ethyl acetylene, inhibited
2453	115	Ethyl fluoride
2453	115	Refrigerant gas R-161
2454	115	Methyl fluoride
2454	115	Refrigerant gas R-41
2455	116	Methyl nitrite
2456	130P	2-Chloropropene
2457	128	2,3-Dimethylbutane
2458	130	Hexadiene
2459	127	2-Methyl-1-butene
2460	127	2-Methyl-2-butene
2461	127	Methylpentadiene
2462	128	Methyl pentane
2463	138	Aluminum hydride
2464	141	Beryllium nitrate
2465	141	Dichloroisocyanuric acid, dry
2465	141	Dichloroisocyanuric acid salts
2465	141	Potassium dichloro-s-triazinetri- one, dry
2465	141	Sodium dichloroisocyanurate
2465	141	Sodium dichloro-s-triazinetri- one
2466	143	Potassium superoxide
2467	140	Sodium percarbonates
2468	141	Trichloroisocyanuric acid, dry
2468	141	Trichloro-s-triazinetri- one, dry
2468	141	(mono)-(Trichloro)-tetra- (monopotassium dichloro)- penta-s-triazinetri- one, dry
2469	140	Zinc bromate
2470	152	Phenylacetonitrile, liquid
2471	154	Osmium tetroxide
2473	154	Sodium arsanilate
2474	157	Thiophosgene
2475	157	Vanadium trichloride

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2477	131	Methyl isothiocyanate
2478	155	Isocyanate solution, flammable, poisonous, n.o.s.
2478	155	Isocyanate solution, flammable, toxic, n.o.s.
2478	155	Isocyanate solutions, n.o.s.
2478	155	Isocyanates, flammable, poisonous, n.o.s.
2478	155	Isocyanates, flammable, toxic, n.o.s.
2478	155	Isocyanates, n.o.s.
2480	155	Methyl isocyanate
2481	155	Ethyl isocyanate
2482	155	n-Propyl isocyanate
2483	155	Isopropyl isocyanate
2484	155	tert-Butyl isocyanate
2485	155	n-Butyl isocyanate
2486	155	Isobutyl isocyanate
2487	155	Phenyl isocyanate
2488	155	Cyclohexyl isocyanate
2489	156	Diphenylmethane-4,4'- diisocyanate
2490	153	Dichloroisopropyl ether
2491	153	Ethanolamine
2491	153	Ethanolamine, solution
2491	153	Monoethanolamine
2493	132	Hexamethyleneimine
2495	144	Iodine pentafluoride
2496	156	Propionic anhydride
2497	153	Sodium phenolate, solid
2498	132	1,2,3,6-Tetrahydro- benzaldehyde
2501	152	1-Aziridinyl phosphine oxide (Tris)

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2501	152	Tri-(1-aziridinyl)phosphine oxide, solution
2501	152	Tris-(1-aziridinyl)phosphine oxide, solution
2502	132	Valeryl chloride
2503	137	Zirconium tetrachloride
2504	159	Acetylene tetrabromide
2504	159	Tetrabromoethane
2505	154	Ammonium fluoride
2506	154	Ammonium hydrogen sulfate
2506	154	Ammonium hydrogen sulphate
2507	154	Chloroplatinic acid, solid
2508	156	Molybdenum pentachloride
2509	154	Potassium hydrogen sulfate
2509	154	Potassium hydrogen sulphate
2511	153	2-Chloropropionic acid
2511	153	alpha-Chloropropionic acid
2512	152	Aminophenols
2513	156	Bromoacetyl bromide
2514	129	Bromobenzene
2515	159	Bromoform
2516	151	Carbon tetrabromide
2517	115	1-Chloro-1,1-difluoroethane
2517	115	Chlorodifluoroethanes
2517	115	Difluorochloroethanes
2517	115	Refrigerant gas R-142b
2518	153	1,5,9-Cyclododecatriene
2520	130P	Cyclooctadienes
2521	131P	Diketene, inhibited
2522	153P	Dimethylaminoethyl methacrylate
2524	129	Ethyl orthoformate
2525	156	Ethyl oxalate
2526	132	Furfurylamine

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2527	130P	Isobutyl acrylate
2527	130P	Isobutyl acrylate, inhibited
2528	129	Isobutyl isobutyrate
2529	132	Isobutyric acid
2530	132	Isobutyric anhydride
2531	153P	Methacrylic acid, inhibited
2533	156	Methyl trichloroacetate
2534	119	Methylchlorosilane
2535	132	4-Methylmorpholine
2535	132	N-Methylmorpholine
2535	132	Methylmorpholine
2536	127	Methyltetrahydrofuran
2538	133	Nitronaphthalene
2541	128	Terpinolene
2542	153	Tributylamine
2545	135	Hafnium powder, dry
2546	135	Titanium powder, dry
2547	143	Sodium superoxide
2548	124	Chlorine pentafluoride
2550	147	Methyl ethyl ketone peroxide.
2551	145	tert-Butyl peroxydiethylacetate, with tert-Butyl peroxybenzoate
2552	151	Hexafluoroacetone hydrate
2553	128	Naphtha
2554	129P	Methylallyl chloride
2555	113	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% water
2555	113	Nitrocellulose with water, not less than 25% water
2556	113	Nitrocellulose, wet, with not less than 30% alcohol or solvent
2556	113	Nitrocellulose with alcohol

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No.	No.		No.	No.	
556	113	Nitrocellulose with not less than 25% alcohol	2582	154	Ferric chloride, solution
557	133	Lacquer chips, dry	2583	153	Alkyl sulfonic acids, solid, with more than 5% free Sulfuric acid
557	133	Nitrocellulose mixture, without plasticizer, without pigment	2583	153	Alkyl sulphonic acids, solid, with more than 5% free Sulphuric acid
557	133	Nitrocellulose mixture, without plasticizer, with pigment	2583	153	Aryl sulfonic acids, solid, with more than 5% free Sulfuric acid
557	133	Nitrocellulose mixture, with plasticizer, without pigment	2583	153	Aryl sulphonic acids, solid, with more than 5% free Sulphuric acid
557	133	Nitrocellulose mixture, with plasticizer, with pigment	2583	153	Toluene sulfonic acid, solid, with more than 5% free Sulfuric acid
557	133	Nitrocellulose with plasticizing substance	2583	153	Toluene sulphonic acid, solid, with more than 5% free Sulphuric acid
558	131	Epibromohydrin	2583	153	Toluene sulfonic acid, solid, with more than 5% free Sulfuric acid
560	129	2-Methylpentan-2-ol	2583	153	Toluene sulphonic acid, solid, with more than 5% free Sulphuric acid
561	127	3-Methyl-1-butene	2584	153	Alkyl sulfonic acids, liquid, with more than 5% free Sulfuric acid
562	148	tert-Butyl peroxyisobutyrate	2584	153	Alkyl sulphonic acids, liquid, with more than 5% free Sulphuric acid
564	153	Trichloroacetic acid, solution	2584	153	Aryl sulfonic acids, liquid, with more than 5% free Sulfuric acid
565	153	Dicyclohexylamine	2584	153	Aryl sulphonic acids, liquid, with more than 5% free Sulphuric acid
567	154	Sodium pentachlorophenate	2584	153	Dodecylbenzenesulfonic acid
570	154	Cadmium compound	2584	153	Dodecylbenzenesulphonic acid
571	156	Alkylsulfuric acids	2584	153	Toluene sulfonic acid, liquid, with more than 5% free Sulfuric acid
571	156	Alkylsulphuric acids	2584	153	Toluene sulphonic acid, liquid, with more than 5% free Sulphuric acid
571	156	Ethylsulfuric acid			
571	156	Ethylsulphuric acid			
572	153	Phenylhydrazine			
573	141	Thallium chlorate			
574	151	Tricresyl phosphate			
576	137	Phosphorus oxybromide, molten			
577	156	Phenylacetyl chloride			
578	157	Phosphorus trioxide			
579	153	Piperazine			
580	154	Aluminum bromide, solution			
581	154	Aluminum chloride, solution			

ID No.	Guide No.	Name of Material
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2585	153	Alkyl sulfonic acids, solid, with not more than 5% free Sulfuric acid
2585	153	Alkyl sulphonic acids, solid, with not more than 5% free Sulphuric acid
2585	153	Aryl sulfonic acids, solid, with not more than 5% free Sulfuric acid
2585	153	Aryl sulphonic acids, solid, with not more than 5% free Sulphuric acid
2585	153	Toluene sulfonic acid, solid, with not more than 5% free Sulfuric acid
2585	153	Toluene sulphonic acid, solid, with not more than 5% free Sulphuric acid
2586	153	Alkyl sulfonic acids, liquid, with not more than 5% free Sulfuric acid
2586	153	Alkyl sulphonic acids, liquid, with not more than 5% free Sulphuric acid
2586	153	Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid
2586	153	Aryl sulphonic acids, liquid, with not more than 5% free Sulphuric acid
2586	153	Toluene sulfonic acid, liquid, with not more than 5% free Sulfuric acid
2586	153	Toluene sulphonic acid, liquid, with not more than 5% free Sulphuric acid
2587	153	Benzoquinone
2588	151	Insecticide, dry, n.o.s.
2588	151	Pesticide, solid, poisonous

ID No.	Guide No.	Name of Material
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2588	151	Pesticide, solid, poisonous, n.o.s.
2588	151	Pesticide, solid, toxic, n.o.s.
2589	155	Vinyl chloroacetate
2590	171	Asbestos, white
2590	171	White asbestos
2591	120	Xenon, refrigerated liquid (cryogenic liquid)
2592	145	Distearyl peroxydicarbonate
2593	148	Di-(2-methylbenzoyl)peroxide
2594	148	tert-Butyl peroxyneodecanoate
2595	148	Dimyristyl peroxydicarbonate
2596	145	tert-Butyl peroxy-3-phenylphthalide
2597	148	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide
2598	145	Ethyl-3,3-di-(tert-butylperoxy)butyrate
2599	126	Chlorotrifluoromethane and Trifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane
2599	126	Refrigerant gas R-13 and Refrigerant gas R-23 azeotropic mixture with 60% Refrigerant gas R-13
2599	126	Refrigerant gas R-23 and Refrigerant gas R-13 azeotropic mixture with 60% Refrigerant gas R-13
2599	126	Refrigerant gas R-503 (azeotropic mixture of Refrigerant gas R-13 and Refrigerant gas R-23 with approximately 60% Refrigerant gas R-13)

Guide Name of Material			ID Guide Name of Material		
No.	No.		No.	No.	
599	126	Trifluoromethane and Chlorotrifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	2606	155	Methyl orthosilicate
600	119	Carbon monoxide and Hydrogen mixture	2607	129P	Acrolein dimer, stabilized
600	119	Carbon monoxide and Hydrogen mixture, compressed	2608	129	Nitropropanes
600	119	Hydrogen and Carbon monoxide mixture	2609	156	Triallyl borate
600	119	Hydrogen and Carbon monoxide mixture, compressed	2610	132	Triallylamine
601	115	Cyclobutane	2611	131	Propylene chlorohydrin
602	126	Dichlorodifluoromethane and Difluoroethane azeotropic mixture with approximately 74% Dichlorodifluoromethane	2612	127	Methyl propyl ether
602	126	Difluoroethane and Dichlorodifluoromethane azeotropic mixture with approximately 74% dichlorodifluoromethane	2614	129	Methallyl alcohol
602	126	Refrigerant gas R-12 and Refrigerant gas R-152a azeotropic mixture with 74% Refrigerant gas R-12	2615	127	Ethyl propyl ether
602	126	Refrigerant gas R-152a and Refrigerant gas R-12 azeotropic mixture with 74% Refrigerant gas R-12	2616	129	Triisopropyl borate
602	126	Refrigerant gas R-500 (azeotropic mixture of Refrigerant gas R-12 and Refrigerant gas R-152a with approximately 74% Refrigerant gas R-12)	2617	129	Methylcyclohexanols
603	131	Cycloheptatriene	2618	130P	Vinyltoluene, inhibited
604	132	Boron trifluoride diethyl etherate	2619	132	Benzyldimethylamine
605	155	Methoxymethyl isocyanate	2620	130	Amyl butyrates
			2621	127	Acetyl methyl carbinol
			2622	131P	Glycidaldehyde
			2623	133	Firelighters, solid, with flammable liquid
			2624	138	Magnesium silicide
			2626	140	Chloric acid
			2626	140	Chloric acid, aqueous solution, with not more than 10% Chloric acid
			2627	140	Nitrites, inorganic, n.o.s.
			2628	151	Potassium fluoroacetate
			2629	151	Sodium fluoroacetate
			2630	151	Barium selenate
			2630	151	Barium selenite
			2630	151	Calcium selenate
			2630	151	Potassium selenate
			2630	151	Potassium selenite
			2630	151	Selenates
			2630	151	Selenites
			2630	151	Sodium selenite

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2630	151	Zinc selenate	2672	154	Ammonia, solution, with more than 10% but not more than 35% Ammonia
2630	151	Zinc selenite	2672	154	Ammonium hydroxide
2642	156	Fluoroacetic acid	2672	154	Ammonium hydroxide, with more than 10% but not more than 35% Ammonia
2643	155	Methyl bromoacetate	2673	151	2-Amino-4-chlorophenol
2644	151	Methyl iodide	2674	154	Sodium fluorosilicate
2645	153	Phenacyl bromide	2674	154	Sodium silicofluoride
2646	151	Hexachlorocyclopentadiene	2676	119	Stibine
2647	153	Malononitrile	2677	154	Rubidium hydroxide, solution
2648	154	1,2-Dibromobutan-3-one	2678	154	Rubidium hydroxide
2649	153	1,3-Dichloroacetone	2678	154	Rubidium hydroxide, solid
2650	153	1,1-Dichloro-1-nitroethane	2679	154	Lithium hydroxide, solution
2651	153	4,4'-Diaminodiphenylmethane	2680	154	Lithium hydroxide, monohydrate
2653	156	Benzyl iodide	2680	154	Lithium hydroxide, solid
2655	151	Potassium fluorosilicate	2681	154	Caesium hydroxide, solution
2655	151	Potassium silicofluoride	2681	154	Cesium hydroxide, solution
2656	154	Quinoline	2682	157	Caesium hydroxide
2657	153	Selenium disulfide	2682	157	Cesium hydroxide
2657	153	Selenium disulphide	2683	132	Ammonium hydrosulfide, solution
2658	152	Selenium powder	2683	132	Ammonium hydrosulphide, solution
2659	151	Sodium chloroacetate	2683	132	Ammonium sulfide, solution
2660	153	Mononitrotoluidines	2683	132	Ammonium sulphide, solution
2660	153	Nitrotoluidines (mono)	2684	132	3-Diethylaminopropylamine
2661	153	Hexachloroacetone	2684	132	Diethylaminopropylamine
2662	153	Hydroquinone	2685	132	N,N-Diethylethylenediamine
2664	160	Dibromomethane	2686	132	2-Diethylaminoethanol
2666	156	Ethyl cyanoacetate	2686	132	Diethylaminoethanol
2667	131	Butyltoluenes	2687	153	Dicyclohexylammonium nitrite
2668	131	Chloroacetonitrile	2688	159	1-Bromo-3-chloropropane
2669	152	Chlorocresols			
2669	152	Chlorocresols, liquid			
2669	152	Chlorocresols, solid			
2670	157	Cyanuric chloride			
2671	153	Aminopyridines			

ID Guide Name of Material			ID Guide Name of Material		
No.	No.		No.	No.	
2688	159	1-Chloro-3-bromopropane	2711	129	Dibromobenzene
2689	153	Glycerol alpha-monochlorohydrin	2713	153	Acridine
2690	152	N,n-Butyl imidazole	2714	133	Zinc resinate
2691	137	Phosphorus pentabromide	2715	133	Aluminum resinate
2692	157	Boron tribromide	2716	153	1,4-Butynediol
2693	154	Ammonium bisulfite, solid	2717	133	Camphor
2693	154	Ammonium bisulfite, solution	2717	133	Camphor, synthetic
2693	154	Ammonium bisulphite, solid	2719	141	Barium bromate
2693	154	Ammonium bisulphite, solution	2720	141	Chromium nitrate
2693	154	Bisulfites, aqueous solution, n.o.s.	2721	141	Copper chlorate
2693	154	Bisulfites, inorganic, aqueous solutions, n.o.s.	2722	140	Lithium nitrate
2693	154	Bisulphites, aqueous solution, n.o.s.	2723	140	Magnesium chlorate
2693	154	Bisulphites, inorganic, aqueous solutions, n.o.s.	2724	140	Manganese nitrate
2693	154	Calcium hydrogen sulfite, solution	2725	140	Nickel nitrate
2693	154	Calcium hydrogen sulphite, solution	2726	140	Nickel nitrite
2693	154	Magnesium bisulfite solution	2727	141	Thallium nitrate
2693	154	Magnesium bisulphite solution	2728	140	Zirconium nitrate
2693	154	Potassium bisulfite solution	2729	152	Hexachlorobenzene
2693	154	Potassium bisulphite solution	2730	152	Nitroanisole
2693	154	Zinc bisulfite solution	2730	152	Nitroanisole, liquid
2693	154	Zinc bisulphite solution	2730	152	Nitroanisole, solid
2698	156	Tetrahydrophthalic anhydrides	2732	152	Nitrobromobenzene
2699	154	Trifluoroacetic acid	2732	152	Nitrobromobenzene, liquid
2705	153P	1-Pentol	2732	152	Nitrobromobenzene, solid
2707	128	Dimethyldioxanes	2733	132	Alkylamines, n.o.s.
2708	127	Butoxyl	2733	132	Amines, flammable, corrosive, n.o.s.
2709	128	Butylbenzenes	2733	132	Polyalkylamines, n.o.s.
2710	127	Dipropyl ketone	2733	132	Polyamines, flammable, corrosive, n.o.s.
			2734	132	Alkylamines, n.o.s.
			2734	132	Amines, liquid, corrosive, flammable, n.o.s.
			2734	132	Polyalkylamines, n.o.s.

ID No.	Guide No.	Name of Material
2734	132	Polyamines, liquid, corrosive, flammable, n.o.s.
2735	153	Alkylamines, n.o.s.
2735	153	Amines, liquid, corrosive, n.o.s.
2735	153	Polyalkylamines, n.o.s.
2735	153	Polyamines, liquid, corrosive, n.o.s.
2738	153	N-Butylaniline
2739	156	Butyric anhydride
2740	155	n-Propyl chloroformate
2741	141	Barium hypochlorite, with more than 22% available Chlorine
2742	155	sec-Butyl chloroformate
2742	155	Chloroformates, n.o.s.
2742	155	Chloroformates, poisonous, corrosive, flammable, n.o.s.
2742	155	Chloroformates, toxic, corrosive, flammable, n.o.s.
2742	155	Isobutyl chloroformate
2743	155	n-Butyl chloroformate
2744	155	Cyclobutyl chloroformate
2745	157	Chloromethyl chloroformate
2746	156	Phenyl chloroformate
2747	156	tert-Butylcyclohexyl chloroformate
2748	156	2-Ethylhexyl chloroformate
2749	130	Tetramethylsilane
2750	153	1,3-Dichloropropanol-2
2751	155	Diethylthiophosphoryl chloride
2752	127	1,2-Epoxy-3-ethoxypropane
2753	153	N-Ethylbenzyltoluidines
2754	153	N-Ethyltoluidines
2755	146	3-Chloroperoxybenzoic acid
2756	146	Organic peroxides, mixtures

ID No.	Guide No.	Name of Material
2757	151	Carbamate pesticide, solid, poisonous
2757	151	Carbamate pesticide, solid, toxic
2757	151	Carbaryl
2757	151	Carbofuran
2757	151	Mexacarbate
2758	131	Carbamate pesticide, liquid, flammable, poisonous
2758	131	Carbamate pesticide, liquid, flammable, toxic
2759	151	Arsenical pesticide, solid, poisonous
2759	151	Arsenical pesticide, solid, toxic
2760	131	Arsenical pesticide, liquid, flammable, poisonous
2760	131	Arsenical pesticide, liquid, flammable, toxic
2761	151	Aldrin, solid
2761	151	Aldrin mixture, dry
2761	151	DDT
2761	151	Dichlorodiphenyltrichloroethane (DDT)
2761	151	Dieldrin
2761	151	Endosulfan
2761	151	Lindane
2761	151	Organochlorine pesticide, solid, poisonous
2761	151	Organochlorine pesticide, solid, toxic
2761	151	TDE (1,1-Dichloro-2,2-bis-(p-chlorophenyl)ethane)
2761	151	Toxaphene
2762	131	Aldrin, liquid
2762	131	Aldrin mixture, liquid

Guide Name of Material No. No.			ID Guide Name of Material No. No.		
762	131	Organochlorine pesticide, liquid, flammable, poisonous	2770	131	Benzoic derivative pesticide, liquid, flammable, toxic
762	131	Organochlorine pesticide, liquid, flammable, toxic	2771	151	Dithiocarbamate pesticide, solid, poisonous
763	151	Triazine pesticide, solid, poisonous	2771	151	Dithiocarbamate pesticide, solid, toxic
763	151	Triazine pesticide, solid, toxic	2771	151	Thiram
764	131	Triazine pesticide, liquid, flammable, poisonous	2772	131	Dithiocarbamate pesticide, liquid, flammable, poisonous
764	131	Triazine pesticide, liquid, flammable, toxic	2772	131	Dithiocarbamate pesticide, liquid, flammable, toxic
765	152	2,4-Dichlorophenoxyacetic acid	2773	151	Phthalimide derivative pesticide, solid, poisonous
765	152	Phenoxy pesticide, solid, poisonous	2773	151	Phthalimide derivative pesticide, solid, toxic
765	152	Phenoxy pesticide, solid, toxic	2774	131	Phthalimide derivative pesticide, liquid, flammable, poisonous
765	152	2,4,5-Trichlorophenoxyacetic acid	2774	131	Phthalimide derivative pesticide, liquid, flammable, toxic
765	152	2,4,5-Trichlorophenoxypropionic acid	2775	151	Copper based pesticide, solid, poisonous
766	131	Phenoxy pesticide, liquid, flammable, poisonous	2775	151	Copper based pesticide, solid, toxic
766	131	Phenoxy pesticide, liquid, flammable, toxic	2776	131	Copper based pesticide, liquid, flammable, poisonous
767	151	Phenyl urea pesticide, solid, poisonous	2776	131	Copper based pesticide, liquid, flammable, toxic
767	151	Phenyl urea pesticide, solid, toxic	2777	151	Mercury based pesticide, solid, poisonous
768	131	Phenyl urea pesticide, liquid, flammable, poisonous	2777	151	Mercury based pesticide, solid, toxic
768	131	Phenyl urea pesticide, liquid, flammable, toxic	2778	131	Mercury based pesticide, liquid, flammable, poisonous
769	151	Benzoic derivative pesticide, solid, poisonous	2778	131	Mercury based pesticide, liquid, flammable, toxic
769	151	Benzoic derivative pesticide, solid, toxic			
2770	131	Benzoic derivative pesticide, liquid, flammable, poisonous			

ID No.	Guide No.	Name of Material
2779	153	Substituted nitrophenol pesticide, solid, poisonous
2779	153	Substituted nitrophenol pesticide, solid, toxic
2780	131	Substituted nitrophenol pesticide, liquid, flammable, poisonous
2780	131	Substituted nitrophenol pesticide, liquid, flammable, toxic
2781	151	Bipyridilium pesticide, solid, poisonous
2781	151	Bipyridilium pesticide, solid, toxic
2782	131	Bipyridilium pesticide, liquid, flammable, poisonous
2782	131	Bipyridilium pesticide, liquid, flammable, toxic
2783	152	Azinphos methyl
2783	152	Chlorpyrifos
2783	152	Coumaphos
2783	152	Diazinon
2783	152	Dichlorvos
2783	152	Disulfoton
2783	152	Ethion
2783	152	Hexaethyl tetraphosphate mixture, liquid
2783	152	Methyl parathion, liquid
2783	152	Methyl parathion, mixture, dry
2783	152	Methyl parathion, solid
2783	152	Mevinphos
2783	152	Organic phosphate, dry
2783	152	Organic phosphate, solid
2783	152	Organic phosphate compound, dry
2783	152	Organic phosphate compound, solid

ID No.	Guide No.	Name of Material
2783	152	Organic phosphorus compound dry
2783	152	Organic phosphorus compound solid
2783	152	Organophosphorus pesticide, solid, poisonous
2783	152	Organophosphorus pesticide, solid, toxic
2783	152	Parathion
2783	152	Parathion mixture, dry
2783	152	Parathion mixture, liquid
2783	152	Tetraethyl pyrophosphate, liquid
2783	152	Tetraethyl pyrophosphate, solid
2783	152	Tetraethyl pyrophosphate mixture, dry
2783	152	Trichlorfon
2784	131	Organophosphorus pesticide, liquid, flammable, poisonous
2784	131	Organophosphorus pesticide, liquid, flammable, toxic
2785	152	4-Thiapentanal
2785	152	Thia-4-pentanal
2786	153	Organotin pesticide, solid, poisonous
2786	153	Organotin pesticide, solid, toxic
2787	131	Organotin pesticide, liquid, flammable, poisonous
2787	131	Organotin pesticide, liquid, flammable, toxic
2788	153	Organotin compound, liquid, n.o.s.
2789	132	Acetic acid, glacial
2789	132	Acetic acid, solution, more than 80% acid
2790	153	Acetic acid, solution, more than 10% but not more than 80% acid

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
793	170	Ferrous metal borings, shavings, turnings or cuttings	2806	138	Lithium nitride
793	170	Steel swarf	2807	171	Magnetized material
794	154	Batteries, wet, filled with acid	2809	172	Mercury
794	154	Battery	2809	172	Mercury, metallic
795	154	Batteries, wet, filled with alkali	2809	172	Mercury metal
795	154	Battery	2810	153	Compound, tree or weed killing, liquid (toxic)
796	157	Battery fluid, acid	2810	153	Drugs, liquid, n.o.s.
796	157	Battery fluid, acid, with battery	2810	153	Medicines, poisonous, liquid, n.o.s.
796	157	Battery fluid, acid, with electronic equipment or actuating device	2810	153	Medicines, toxic, liquid, n.o.s.
796	157	Sulfuric acid, with not more than 51% acid	2810	153	Poison B, liquid, n.o.s.
796	157	Sulphuric acid, with not more than 51% acid	2810	153	Poisonous liquid, n.o.s.
797	154	Battery fluid, alkali	2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)
797	154	Battery fluid, alkali, with battery	2810	153	Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)
797	154	Battery fluid, alkali, with electronic equipment or actuating device	2810	153	Poisonous liquid, organic, n.o.s.
798	137	Benzene phosphorus dichloride	2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)
798	137	Phenylphosphorus dichloride	2810	153	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)
799	137	Benzene phosphorus thiodichloride	2810	153	Toxic liquid, n.o.s.
799	137	Phenylphosphorus thiodichloride	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone A)
800	154	Batteries, wet, non-spillable	2810	153	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)
801	154	Coal tar dye, liquid	2810	153	Toxic liquid, organic, n.o.s.
801	154	Dye, liquid, corrosive, n.o.s.	2810	153	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)
801	154	Dye intermediate, liquid, corrosive, n.o.s.	2810	153	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)
802	154	Copper chloride	2811	154	Drugs, solid, n.o.s.
803	172	Gallium	2811	154	Flue dust, poisonous
805	138	Lithium hydride, fused solid	2811	154	Lead fluoride

ID No.	Guide No.	Name of Material
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2811	154	Medicines, poisonous, solid, n.o.s.
2811	154	Medicines, toxic, solid, n.o.s.
2811	154	Poison B, solid, n.o.s.
2811	154	Poisonous solid, n.o.s.
2811	154	Poisonous solid, organic, n.o.s.
2811	154	Selenium oxide
2811	154	Toxic solid, n.o.s.
2811	154	Toxic solid, organic, n.o.s.
2812	154	Sodium aluminate, solid
2813	138	Lithium acetylide-Ethylenediamine complex
2813	138	Substances, which in contact with water emit flammable gases, solid, n.o.s.
2813	138	Water-reactive solid, n.o.s.
2813	138	Water-reactive substances, solid, n.o.s.
2814	158	Etiologic agent, n.o.s.
2814	158	Infectious substance, affecting humans
2815	153	N-Aminoethylpiperazine
2817	154	Ammonium bifluoride, solution
2817	154	Ammonium hydrogendifluoride, solution
2817	154	Ammonium hydrogen fluoride, solution
2818	154	Ammonium polysulfide, solution
2818	154	Ammonium polysulphide, solution
2819	153	Amyl acid phosphate
2820	153	Butyric acid
2821	153	Phenol, liquid
2821	153	Phenol solution
2822	153	2-Chloropyridine

ID No.	Guide No.	Name of Material
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2823	153	Crotonic acid
2823	153	Crotonic acid, liquid
2823	153	Crotonic acid, solid
2826	155	Ethyl chlorothioformate
2829	153	Caproic acid
2829	153	Hexanoic acid
2830	139	Lithium ferrosilicon
2831	160	1,1,1-Trichloroethane
2834	154	Phosphorous acid
2834	154	Phosphorous acid, ortho
2835	138	Sodium aluminum hydride
2837	154	Bisulfates, aqueous solution
2837	154	Bisulphates, aqueous solution
2837	154	Sodium bisulfate, solution
2837	154	Sodium bisulphate, solution
2837	154	Sodium hydrogen sulfate, solution
2837	154	Sodium hydrogen sulphate, solution
2838	129P	Vinyl butyrate, inhibited
2839	153	Aldol
2840	129	Butyraldoxime
2841	132	Di-n-amylamine
2842	129	Nitroethane
2844	138	Calcium manganese silicon
2845	135	Ethyl phosphonous dichloride, anhydrous
2845	135	Methyl phosphonous dichloride
2845	135	Pyrophoric liquid, n.o.s.
2845	135	Pyrophoric liquid, organic, n.o.s.
2846	135	Pyrophoric solid, n.o.s.
2846	135	Pyrophoric solid, organic, n.o.s.
2849	153	3-Chloropropanol-1
2850	128	Propylene tetramer

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
851	157	Boron trifluoride, dihydrate	2859	154	Ammonium metavanadate
852	113	Dipicryl sulfide, wetted with not less than 10% water	2860	154	Vanadium trioxide
852	113	Dipicryl sulphide, wetted with not less than 10% water	2861	151	Ammonium polyvanadate
853	151	Magnesium fluorosilicate	2862	151	Vanadium pentoxide
853	151	Magnesium silicofluoride	2863	154	Sodium ammonium vanadate
854	151	Ammonium fluorosilicate	2864	151	Potassium metavanadate
854	151	Ammonium silicofluoride	2865	154	Hydroxylamine sulfate
855	151	Zinc fluorosilicate	2865	154	Hydroxylamine sulphate
855	151	Zinc silicofluoride	2869	157	Titanium trichloride mixture
856	151	Fluorosilicates, n.o.s.	2870	135	Aluminum borohydride
856	151	Silicofluorides, n.o.s.	2870	135	Aluminum borohydride in devices
857	126	Refrigerating machines, containing Ammonia solutions (UN2073)	2871	170	Antimony powder
857	126	Refrigerating machines, containing Ammonia solutions (UN2672)	2872	159	Dibromochloropropanes
857	126	Refrigerating machines, containing non-flammable, liquefied gas	2873	153	Dibutylaminoethanol
857	126	Refrigerating machines, containing non-flammable, non-poisonous, liquefied gas	2874	153	Furfuryl alcohol
857	126	Refrigerating machines, containing non-flammable, non-poisonous, non-corrosive, liquefied gas	2875	151	Hexachlorophene
857	126	Refrigerating machines, containing non-flammable, non-toxic, liquefied gas	2876	153	Resorcinol
857	126	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	2878	170	Titanium sponge granules
857	126	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	2878	170	Titanium sponge powders
857	126	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	2879	157	Selenium oxychloride
858	170	Zirconium, dry, coiled wire, finished metal sheets or strips	2880	140	Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water
			2880	140	Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10% water
			2881	135	Metal catalyst, dry
			2881	135	Nickel catalyst, dry
			2883	145	2,2-Di-(tert-butylperoxy)-propane
			2884	145	2,2-Di-(tert-butylperoxy)-propane

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2885	145	1,1-Di-(tert-butylperoxy)-cyclohexane	2902	151	Pesticide, liquid, poisonous, n.o.s.
2886	148	tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane	2902	151	Pesticide, liquid, toxic, n.o.s.
2887	145	tert-Butyl peroxy-2-ethylhexanoate, with 2,2-Di-(tert-butylperoxy)butane	2903	131	Pesticide, liquid, poisonous, flammable, n.o.s.
2888	148	tert-Butyl peroxy-2-ethylhexanoate, not more than 50%, with phlegmatizer	2903	131	Pesticide, liquid, toxic, flammable, n.o.s.
2889	148	Diisotridecyl peroxydicarbonate	2904	154	Chlorophenates, liquid
2890	145	tert-Butyl peroxybenzoate	2904	154	Chlorophenolates, liquid
2891	148	tert-Amyl peroxyneodecanoate	2904	154	Phenolates, liquid
2892	148	Dimyristyl peroxydicarbonate, not more than 42%, in water	2905	154	Chlorophenates, solid
2893	145	Lauroyl peroxide, not more than 42%, stable dispersion, in water	2905	154	Chlorophenolates, solid
2894	148	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	2905	154	Phenolates, solid
2895	148	Dicetyl peroxydicarbonate, not more than 42%, in water	2906	127	Triisocyanatoisocyanurate of Isophoronedisocyanate, solution (70%)
2896	147	Cyclohexanone peroxide, not more than 72% as a paste	2907	133	Isosorbide dinitrate mixture
2897	145	1,1-Di-(tert-butylperoxy)-cyclohexane	2908	161	Radioactive material, empty packages
2898	148	tert-Amyl peroxy-2-ethylhexanoate	2909	161	Radioactive material, articles manufactured from depleted Uranium
2899	148	Organic peroxides, n.o.s. (including trial quantities)	2909	161	Radioactive material, articles manufactured from natural Thorium
2900	158	Infectious substance, affecting animals only	2909	161	Radioactive material, articles manufactured from natural Uranium
2901	124	Bromine chloride	2910	161	Radioactive material, excepted package, articles manufactured from depleted Uranium
2902	151	Allethrin	2910	161	Radioactive material, excepted package, articles manufactured from natural Thorium
2902	151	Insecticide, liquid, poisonous, n.o.s.			

Guide Name of Material No. No.			ID Guide Name of Material No. No.		
910	161	Radioactive material, excepted package, articles manufactured from natural Uranium	2924	132	Dichlorobutene
910	161	Radioactive material, excepted package, empty packaging	2924	132	Flammable liquid, corrosive, n.o.s.
910	161	Radioactive material, excepted package, instruments or articles	2925	134	Flammable solid, corrosive, n.o.s.
910	161	Radioactive material, excepted package, limited quantity of material	2925	134	Flammable solid, corrosive, organic, n.o.s.
910	161	Radioactive material, limited quantity, n.o.s.	2926	134	Flammable solid, poisonous, n.o.s.
911	161	Radioactive material, instruments and articles	2926	134	Flammable solid, poisonous, organic, n.o.s.
912	162	Radioactive material, low specific activity (LSA), n.o.s.	2926	134	Flammable solid, toxic, organic, n.o.s.
913	162	Radioactive material, surface contaminated objects (SCO)	2927	154	Ethyl phosphonothioic dichloride, anhydrous
918	165	Radioactive material, fissile, n.o.s.	2927	154	Ethyl phosphorodichloridate
920	132	Corrosive liquid, flammable, n.o.s.	2927	154	Poisonous liquid, corrosive, n.o.s.
920	132	Dichlorobutene	2927	154	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)
921	134	Corrosive solid, flammable, n.o.s.	2927	154	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)
922	154	Corrosive liquid, poisonous, n.o.s.	2927	154	Toxic liquid, corrosive, organic, n.o.s.
922	154	Corrosive liquid, toxic, n.o.s.	2927	154	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)
922	154	Sodium hydrosulfide, solution	2927	154	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)
922	154	Sodium hydrosulphide, solution	2928	154	Poisonous solid, corrosive, n.o.s.
923	154	Corrosive solid, poisonous, n.o.s.	2928	154	Toxic solid, corrosive, organic, n.o.s.
923	154	Corrosive solid, toxic, n.o.s.	2929	131	Chloropicrin mixture, flammable
923	154	Sodium hydrosulfide, solid			
923	154	Sodium hydrosulphide, solid			

ID No.	Guide No.	Name of Material
2929	131	Poisonous liquid, flammable, n.o.s.
2929	131	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)
2929	131	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)
2929	131	Poisonous liquid, flammable, organic, n.o.s.
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)
2929	131	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)
2929	131	Toxic liquid, flammable, n.o.s.
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)
2929	131	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)
2929	131	Toxic liquid, flammable, organic, n.o.s.
2929	131	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)
2929	131	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)
2930	134	Poisonous solid, flammable, n.o.s.
2930	134	Poisonous solid, flammable, organic, n.o.s.
2930	134	Toxic solid, flammable, n.o.s.
2930	134	Toxic solid, flammable, organic, n.o.s.
2931	151	Vanadyl sulfate
2931	151	Vanadyl sulphate

ID No.	Guide No.	Name of Material
2933	132	Methyl 2-chloropropionate
2934	132	Isopropyl 2-chloropropionate
2935	132	Ethyl 2-chloropropionate
2936	153	Thiolactic acid
2937	153	alpha-Methylbenzyl alcohol
2937	153	Methylbenzyl alcohol (alpha)
2938	152	Methyl benzoate
2940	135	Cyclooctadiene phosphines
2940	135	9-Phosphabicyclononanes
2941	153	Fluoroanilines
2942	153	2-Trifluoromethylaniline
2943	129	Tetrahydrofurfurylamine
2945	132	N-Methylbutylamine
2946	153	2-Amino-5-diethylaminopentan
2947	155	Isopropyl chloroacetate
2948	153	3-Trifluoromethylaniline
2949	154	Sodium hydrosulfide, with not less than 25% water of crystallization
2949	154	Sodium hydrosulphide, with not less than 25% water of crystallization
2950	138	Magnesium granules, coated
2951	149	Diphenyloxide-4,4'-disulfohydrazide
2951	149	Diphenyloxide-4,4'-disulphohydrazide
2952	150	Azodiisobutyronitrile
2953	150	2,2'-Azodi-(2,4-dimethylvaleronitrile)
2954	149	1,1'-Azodi-(hexahydrobenzonitrile)
2955	150	2,2'-Azodi-(2,4-dimethyl-4-methoxyvaleronitrile)
2956	149	5-tert-Butyl-2,4,6-trinitro-m-xylene

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
2956	149	Musk xylene	2979	162	Uranium metal, pyrophoric
2965	139	Boron trifluoride dimethyl etherate	2980	162	Uranyl nitrate, hexahydrate, solution
2966	153	Thioglycol	2981	162	Uranyl nitrate, solid
2967	154	Sulfamic acid	2982	163	Radioactive material, n.o.s.
2967	154	Sulphamic acid	2983	129P	Ethylene oxide and Propylene oxide mixture, with not more than 30% Ethylene oxide
2968	135	Maneb, stabilized	2983	129P	Propylene oxide and Ethylene oxide mixture, with not more than 30% Ethylene oxide
2968	135	Maneb preparation, stabilized	2984	140	Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide
2969	171	Castor beans, meal, pomace or flake	2985	155	Chlorosilanes, flammable, corrosive, n.o.s.
2970	149	Benzene sulfohydrazide	2985	155	Chlorosilanes, n.o.s.
2970	149	Benzene sulphohydrazide	2986	155	Chlorosilanes, corrosive, flammable, n.o.s.
2971	149	Benzene-1,3-disulfohydrazide	2986	155	Chlorosilanes, n.o.s.
2971	149	Benzene-1,3-disulphohydrazide	2987	156	Chlorosilanes, corrosive, n.o.s.
2972	149	N,N'-Dinitrosopentamethylene tetramine	2987	156	Chlorosilanes, n.o.s.
2973	149	N,N'-Dinitroso-N,N'-dimethyl terephthalamide	2988	139	Chlorosilanes, n.o.s.
2974	164	Radioactive material, special form, n.o.s.	2988	139	Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.
2975	162	Thorium metal, pyrophoric	2989	133	Lead phosphite, dibasic
2976	162	Thorium nitrate, solid	2990	171	Aircraft evacuation slides
2977	166	Radioactive material, Uranium hexafluoride, fissile	2990	171	Life-saving appliances, self-inflating
2977	166	Uranium hexafluoride, fissile containing more than 1% Uranium-235	2991	131	Carbamate pesticide, liquid, poisonous, flammable
2978	166	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	2991	131	Carbamate pesticide, liquid, toxic, flammable
2978	166	Uranium hexafluoride, fissile excepted	2992	151	Carbamate pesticide, liquid, poisonous
2978	166	Uranium hexafluoride, low specific activity			
2978	166	Uranium hexafluoride, non-fissile			

ID Guide Name of Material No. No.			ID Guide Name of Material No. No.		
2992	151	Carbamate pesticide, liquid, toxic	3002	151	Phenyl urea pesticide, liquid, toxic
2993	131	Arsenical pesticide, liquid, poisonous, flammable	3003	131	Benzoic derivative pesticide, liquid, poisonous, flammable
2993	131	Arsenical pesticide, liquid, toxic, flammable	3003	131	Benzoic derivative pesticide, liquid, toxic, flammable
2994	151	Arsenical pesticide, liquid, poisonous	3004	151	Benzoic derivative pesticide, liquid, poisonous
2994	151	Arsenical pesticide, liquid, toxic	3004	151	Benzoic derivative pesticide, liquid, toxic
2995	131	Organochlorine pesticide, liquid, poisonous, flammable	3005	131	Dithiocarbamate pesticide, liquid, poisonous, flammable
2995	131	Organochlorine pesticide, liquid, toxic, flammable	3005	131	Dithiocarbamate pesticide, liquid, toxic, flammable
2996	151	Organochlorine pesticide, liquid, poisonous	3006	151	Dithiocarbamate pesticide, liquid, poisonous
2996	151	Organochlorine pesticide, liquid, toxic	3006	151	Dithiocarbamate pesticide, liquid, toxic
2997	131	Triazine pesticide, liquid, poisonous, flammable	3007	131	Phthalimide derivative pesticide, liquid, poisonous, flammable
2997	131	Triazine pesticide, liquid, toxic, flammable	3007	131	Phthalimide derivative pesticide, liquid, toxic, flammable
2998	151	Triazine pesticide, liquid, poisonous	3008	151	Phthalimide derivative pesticide, liquid, poisonous
2998	151	Triazine pesticide, liquid, toxic	3008	151	Phthalimide derivative pesticide, liquid, toxic
2999	131	Phenoxy pesticide, liquid, poisonous, flammable	3009	131	Copper based pesticide, liquid, poisonous, flammable
2999	131	Phenoxy pesticide, liquid, toxic, flammable	3009	131	Copper based pesticide, liquid, toxic, flammable
3000	152	Phenoxy pesticide, liquid, poisonous	3010	151	Copper based pesticide, liquid, poisonous
3000	152	Phenoxy pesticide, liquid, toxic	3010	151	Copper based pesticide, liquid, toxic
3001	131	Phenyl urea pesticide, liquid, poisonous, flammable	3011	131	Mercury based pesticide, liquid, poisonous, flammable
3001	131	Phenyl urea pesticide, liquid, toxic, flammable			
3002	151	Phenyl urea pesticide, liquid, poisonous			

ID No.	Guide No.	Name of Material
3011	131	Mercury based pesticide, liquid, toxic, flammable
3012	151	Mercury based pesticide, liquid, poisonous
3012	151	Mercury based pesticide, liquid, toxic
3013	131	Substituted nitrophenol pesticide, liquid, poisonous, flammable
3013	131	Substituted nitrophenol pesticide, liquid, toxic, flammable
3014	153	Substituted nitrophenol pesticide, liquid, poisonous
3014	153	Substituted nitrophenol pesticide, liquid, toxic
3015	131	Bipyridilium pesticide, liquid, poisonous, flammable
3015	131	Bipyridilium pesticide, liquid, toxic, flammable
3016	151	Bipyridilium pesticide, liquid, poisonous
3016	151	Bipyridilium pesticide, liquid, toxic
3017	131	Organophosphorus pesticide, liquid, poisonous, flammable
3017	131	Organophosphorus pesticide, liquid, toxic, flammable
3018	152	Methyl parathion, liquid
3018	152	Organophosphorus pesticide, liquid, poisonous
3018	152	Organophosphorus pesticide, liquid, toxic
3018	152	Tetraethyl pyrophosphate, liquid
3019	131	Organotin pesticide, liquid, poisonous, flammable
3019	131	Organotin pesticide, liquid, toxic, flammable

ID No.	Guide No.	Name of Material
3020	153	Organotin pesticide, liquid, poisonous
3020	153	Organotin pesticide, liquid, toxic
3021	131	Pesticide, liquid, flammable, poisonous
3021	131	Pesticide, liquid, flammable, toxic
3022	127P	1,2-Butylene oxide, stabilized
3023	131	2-Methyl-2-heptanethiol
3023	131	tert-Octyl mercaptan
3024	131	Coumarin derivative pesticide, liquid, flammable, poisonous
3024	131	Coumarin derivative pesticide, liquid, flammable, toxic
3025	131	Coumarin derivative pesticide, liquid, poisonous, flammable
3025	131	Coumarin derivative pesticide, liquid, toxic, flammable
3026	151	Coumarin derivative pesticide, liquid, poisonous
3026	151	Coumarin derivative pesticide, liquid, toxic
3027	151	Coumarin derivative pesticide, solid, poisonous
3027	151	Coumarin derivative pesticide, solid, toxic
3028	154	Batteries, dry, containing Potassium hydroxide, solid
3030	150	2,2'-Azodi-(2-methyl-butynitrile)
3031	149	Self-reactive substances, samples, n.o.s.
3032	149	Self-reactive substances, trial quantities, n.o.s.
3033	149	3-Chloro-4-diethylamino-benzenediazonium zinc chloride

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3034	149	4-Dipropylaminobenzene-diazonium zinc chloride	3051	135	Aluminum alkyls
3035	150	3-(2-Hydroxyethoxy)-4-pyrrolidin-1-yl benzene-diazonium zinc chloride	3052	135	Aluminum alkyl halides
3036	150	2,5-Diethoxy-4-morpholinobenzenediazonium zinc chloride	3053	135	Magnesium alkyls
3037	149	4-[Benzyl(ethyl)amino]-3-ethoxybenzenediazonium zinc chloride	3054	131	Cyclohexanethiol
3038	150	4-[Benzyl(methyl)amino]-3-ethoxybenzenediazonium zinc chloride	3054	131	Cyclohexyl mercaptan
3039	150	4-Dimethylamino-6-(2-dimethylaminoethoxy)toluene-2-diazonium zinc chloride	3055	153	2-(2-Aminoethoxy)ethanol
3040	149	Sodium 2-diazo-1-naphthol-4-sulfonate	3056	129	n-Heptaldehyde
3040	149	Sodium 2-diazo-1-naphthol-4-sulphonate	3057	125	Trifluoroacetyl chloride
3041	149	Sodium 2-diazo-1-naphthol-5-sulfonate	3064	127	Nitroglycerin, solution in alcohol, with more than 1% but not more than 5% Nitroglycerin
3041	149	Sodium 2-diazo-1-naphthol-5-sulphonate	3065	127	Alcoholic beverages
3042	149	2-Diazo-1-naphthol-4-sulfochloride	3066	153	Paint (corrosive)
3042	149	2-Diazo-1-naphthol-4-sulphochloride	3066	153	Paint related material (corrosive)
3043	149	2-Diazo-1-naphthol-5-sulfochloride	3070	126	Dichlorodifluoromethane and Ethylene oxide mixture, with not more than 12.5% Ethylene oxide
3043	149	2-Diazo-1-naphthol-5-sulphochloride	3070	126	Dichlorodifluoromethane and Ethylene oxide mixtures, with not more than 12% Ethylene oxide
3048	157	Aluminum phosphide pesticide	3070	126	Ethylene oxide and Dichlorodifluoromethane mixture, with not more than 12.5% Ethylene oxide
3049	138	Metal alkyl halides, n.o.s.	3070	126	Ethylene oxide and Dichlorodifluoromethane mixtures, with not more than 12% Ethylene oxide
3049	138	Metal aryl halides, n.o.s.	3071	131	Mercaptan mixture, liquid, poisonous, flammable, n.o.s.
3050	138	Metal alkyl hydrides, n.o.s.	3071	131	Mercaptan mixture, liquid, toxic, flammable, n.o.s.
3050	138	Metal aryl hydrides, n.o.s.	3071	131	Mercaptan mixtures, liquid, n.o.s.

ID No.	Guide No.	Name of Material
3071	131	Mercaptans, liquid, n.o.s.
3071	131	Mercaptans, liquid, poisonous, flammable, n.o.s.
3071	131	Mercaptans, liquid, toxic, flammable, n.o.s.
3072	171	Aircraft survival kits
3072	171	Life-saving appliances, not self-inflating
3073	131P	Vinylpyridines, inhibited
3076	138	Aluminum alkyl hydrides
3077	171	Environmentally hazardous substances, solid, n.o.s.
3077	171	Hazardous waste, solid, n.o.s.
3077	171	Other regulated substances, solid, n.o.s.
3078	138	Cerium, turnings or gritty powder
3079	131P	Methacrylonitrile, inhibited
3080	155	Isocyanate solution, poisonous, flammable, n.o.s.
3080	155	Isocyanate solution, toxic, flammable, n.o.s.
3080	155	Isocyanate solutions, n.o.s.
3080	155	Isocyanates, n.o.s.
3080	155	Isocyanates, poisonous, flammable, n.o.s.
3080	155	Isocyanates, toxic, flammable, n.o.s.
3082	171	Environmentally hazardous substances, liquid, n.o.s.
3082	171	Hazardous waste, liquid, n.o.s.
3082	171	Other regulated substances, liquid, n.o.s.
3083	124	Perchloryl fluoride
3084	140	Corrosive solid, oxidizing, n.o.s.
3085	141	Oxidizing solid, corrosive, n.o.s.

ID No.	Guide No.	Name of Material
3085	141	Oxidizing substances, solid, corrosive, n.o.s.
3086	141	Poisonous solid, oxidizing, n.o.s.
3086	141	Toxic solid, oxidizing, n.o.s.
3087	141	Oxidizing solid, poisonous, n.o.s.
3087	141	Oxidizing solid, toxic, n.o.s.
3087	141	Oxidizing substances, solid, poisonous, n.o.s.
3087	141	Oxidizing substances, solid, toxic, n.o.s.
3088	135	Self-heating solid, organic, n.o.s.
3088	135	Self-heating substances, solid, n.o.s.
3089	170	Metal powder, flammable, n.o.s.
3090	138	Lithium batteries
3090	138	Lithium batteries, liquid or solid cathode
3091	138	Lithium batteries contained in equipment
3091	138	Lithium batteries packed with equipment
3092	129	1-Methoxy-2-propanol
3093	140	Corrosive liquid, oxidizing, n.o.s.
3094	138	Corrosive liquid, water-reactive, n.o.s.
3094	138	Corrosive liquid, which in contact with water emits flammable gases, n.o.s.
3095	136	Corrosive solid, self-heating, n.o.s.
3096	138	Corrosive solid, water-reactive, n.o.s.

ID No.	Guide No.	Name of Material
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3096	138	Corrosive solid, which in contact with water emits flammable gases, n.o.s.
3097	140	Flammable solid, oxidizing, n.o.s.
3098	140	Oxidizing liquid, corrosive, n.o.s.
3098	140	Oxidizing substances, liquid, corrosive, n.o.s.
3099	142	Oxidizing liquid, poisonous, n.o.s.
3099	142	Oxidizing liquid, toxic, n.o.s.
3099	142	Oxidizing substances, liquid, poisonous, n.o.s.
3099	142	Oxidizing substances, liquid, toxic, n.o.s.
3100	135	Oxidizing solid, self-heating, n.o.s.
3100	135	Oxidizing substances, self-heating, n.o.s.
3100	135	Oxidizing substances, solid, self-heating, n.o.s.
3101	146	Organic peroxide type B, liquid
3102	146	Organic peroxide type B, solid
3103	146	Organic peroxide type C, liquid
3104	146	Organic peroxide type C, solid
3105	145	Organic peroxide type D, liquid
3106	145	Organic peroxide type D, solid
3107	145	Organic peroxide type E, liquid
3108	145	Organic peroxide type E, solid
3109	145	Organic peroxide type F, liquid
3110	145	Organic peroxide type F, solid
3111	148	Organic peroxide type B, liquid, temperature controlled
3112	148	Organic peroxide type B, solid, temperature controlled
3113	148	Organic peroxide type C, liquid, temperature controlled

ID No.	Guide No.	Name of Material
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3114	148	Organic peroxide type C, solid, temperature controlled
3115	148	Organic peroxide type D, liquid, temperature controlled
3116	148	Organic peroxide type D, solid, temperature controlled
3117	148	Organic peroxide type E, liquid, temperature controlled
3118	148	Organic peroxide type E, solid, temperature controlled
3119	148	Organic peroxide type F, liquid, temperature controlled
3120	148	Organic peroxide type F, solid, temperature controlled
3121	144	Oxidizing solid, water-reactive, n.o.s.
3121	144	Oxidizing substances, solid, which in contact with water emit flammable gases, n.o.s.
3122	142	Poisonous liquid, oxidizing, n.o.s.
3122	142	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)
3122	142	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3122	142	Toxic liquid, oxidizing, n.o.s.
3122	142	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)
3122	142	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)
3123	139	Poisonous liquid, water-reactive, n.o.s.
3123	139	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)

ID Guide Name of Material No. No.			ID Guide Name of Material No. No.		
3123	139	Poisonous liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	3125	139	Poisonous solid, which in contact with water emits flammable gases, n.o.s.
3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	3125	139	Toxic solid, water-reactive, n.o.s.
3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	3125	139	Toxic solid, which in contact with water emits flammable gases, n.o.s.
3123	139	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	3126	136	Self-heating solid, corrosive, organic, n.o.s.
3123	139	Toxic liquid, water-reactive, n.o.s.	3126	136	Self-heating substance, solid, corrosive, n.o.s.
3123	139	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	3127	135	Self-heating solid, oxidizing, n.o.s.
3123	139	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	3127	135	Self-heating substances, solid, oxidizing, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s.	3128	136	Self-heating solid, organic, poisonous, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	3128	136	Self-heating solid, organic, toxic, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	3128	136	Self-heating solid, poisonous, organic, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s.	3128	136	Self-heating solid, toxic, organic, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	3128	136	Self-heating substances, solid, poisonous, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	3128	136	Self-heating substances, solid, toxic, n.o.s.
3123	139	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	3129	138	Substances, which in contact with water emit flammable gases, liquid, corrosive, n.o.s.
3124	136	Poisonous solid, self-heating, n.o.s.	3129	138	Water-reactive liquid, corrosive, n.o.s.
3124	136	Toxic solid, self-heating, n.o.s.	3129	138	Water-reactive substances, liquid, corrosive, n.o.s.
3125	139	Poisonous solid, water-reactive, n.o.s.	3130	139	Substances, which in contact with water emit flammable gases, liquid, poisonous, n.o.s.

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| 3130 | 139 | Substances, which in contact with water emit flammable gases, liquid, toxic, n.o.s. |
| 3130 | 139 | Water-reactive liquid, poisonous, n.o.s. |
| 3130 | 139 | Water-reactive liquid, toxic, n.o.s. |
| 3130 | 139 | Water-reactive substances, liquid, poisonous, n.o.s. |
| 3130 | 139 | Water-reactive substances, liquid, toxic, n.o.s. |
| 3131 | 138 | Substances, which in contact with water emit flammable gases, solid, corrosive, n.o.s. |
| 3131 | 138 | Water-reactive solid, corrosive, n.o.s. |
| 3131 | 138 | Water-reactive substances, solid, corrosive, n.o.s. |
| 3132 | 138 | Substances, which in contact with water emit flammable gases, solid, flammable, n.o.s. |
| 3132 | 138 | Water-reactive solid, flammable, n.o.s. |
| 3132 | 138 | Water-reactive substances, solid, flammable, n.o.s. |
| 3133 | 138 | Substances, which in contact with water emit flammable gases, solid, oxidizing, n.o.s. |
| 3133 | 138 | Water-reactive solid, oxidizing, n.o.s. |
| 3133 | 138 | Water-reactive substances, solid, oxidizing, n.o.s. |
| 3134 | 139 | Substances, which in contact with water emit flammable gases, solid, poisonous, n.o.s. |

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| 3134 | 139 | Substances, which in contact with water emit flammable gases, solid, toxic, n.o.s. |
| 3134 | 139 | Water-reactive solid, poisonous, n.o.s. |
| 3134 | 139 | Water-reactive solid, toxic, n.o.s. |
| 3134 | 139 | Water-reactive substances, solid, poisonous, n.o.s. |
| 3134 | 139 | Water-reactive substances, solid, toxic, n.o.s. |
| 3135 | 138 | Substances, which in contact with water emit flammable gases, solid, self-heating, n.o.s. |
| 3135 | 138 | Water-reactive solid, self-heating, n.o.s. |
| 3135 | 138 | Water-reactive substances, solid, self-heating, n.o.s. |
| 3136 | 120 | Trifluoromethane, refrigerated liquid |
| 3137 | 140 | Oxidizing solid, flammable, n.o.s. |
| 3137 | 140 | Oxidizing substances, solid, flammable, n.o.s. |
| 3138 | 116 | Acetylene, Ethylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene. |
| 3138 | 116 | Ethylene, Acetylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene. |

ID Guide Name of Material No. No.			ID Guide Name of Material No. No.		
3138	116	Propylene, Ethylene and Acetylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene.	3148	138	Substances, which in contact with water emit flammable gases, liquid, n.o.s.
3139	140	Oxidizing liquid, n.o.s.	3148	138	Water-reactive liquid, n.o.s.
3139	140	Oxidizing substances, liquid, n.o.s.	3148	138	Water-reactive substances, liquid, n.o.s.
3140	151	Alkaloids, liquid, n.o.s. (poisonous)	3149	140	Hydrogen peroxide and Peroxyacetic acid mixture, with acid(s), water and not more than 5% Peroxyacetic acid, stabilized
3140	151	Alkaloid salts, liquid, n.o.s. (poisonous)	3150	115	Devices, small, hydrocarbon gas powered, with release device
3141	157	Antimony compound, inorganic, liquid, n.o.s.	3150	115	Hydrocarbon gas refills for small devices, with release device
3142	151	Disinfectant, liquid, poisonous, n.o.s.	3151	171	Polyhalogenated biphenyls, liquid
3142	151	Disinfectant, liquid, toxic, n.o.s.	3151	171	Polyhalogenated terphenyls, liquid
3142	151	Disinfectants, liquid, n.o.s. (poisonous)	3152	171	Polyhalogenated biphenyls, solid
3143	151	Dye, solid, poisonous, n.o.s.	3152	171	Polyhalogenated terphenyls, solid
3143	151	Dye, solid, toxic, n.o.s.	3153	115	Perfluoromethyl vinyl ether
3143	151	Dye intermediate, solid, poisonous, n.o.s.	3153	115	Perfluoro(methylvinyl ether)
3143	151	Dye intermediate, solid, toxic, n.o.s.	3154	115	Perfluoroethyl vinyl ether
3144	151	Nicotine compound, liquid, n.o.s.	3154	115	Perfluoro(ethylvinyl ether)
3144	151	Nicotine preparation, liquid, n.o.s.	3155	154	Pentachlorophenol
3145	153	Alkyl phenols, liquid, n.o.s. (including C2-C12 homologues)	3156	122	Compressed gas, oxidizing, n.o.s.
3146	153	Organotin compound, solid, n.o.s.	3157	122	Liquefied gas, oxidizing, n.o.s.
3147	154	Dye, solid, corrosive, n.o.s.	3158	120	Gas, refrigerated liquid, n.o.s.
3147	154	Dye intermediate, solid, corrosive, n.o.s.	3159	126	Refrigerant gas R-134a
			3159	126	1,1,1,2-Tetrafluoroethane
			3160	119	Liquefied gas, poisonous, flammable, n.o.s.

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3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)
3160	119	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)
3160	119	Liquefied gas, toxic, flammable, n.o.s.
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)
3160	119	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)
3161	115	Liquefied gas, flammable, n.o.s.
3162	123	Liquefied gas, poisonous, n.o.s.
3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)
3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)
3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)
3162	123	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)
3162	123	Liquefied gas, toxic, n.o.s.
3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)

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3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)
3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)
3162	123	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)
3163	126	Liquefied gas, n.o.s.
3164	126	Articles, pressurized, hydraulic (containing non-flammable gas)
3164	126	Articles, pressurized, pneumatic (containing non-flammable gas)
3165	131	Aircraft hydraulic power unit fuel tank
3166	128	Engines, internal combustion, including when fitted in machinery or vehicles
3167	115	Gas sample, non-pressurized, flammable, n.o.s.; not refrigerated liquid
3168	119	Gas sample, non-pressurized, poisonous, flammable, n.o.s., not refrigerated liquid
3168	119	Gas sample, non-pressurized, toxic, flammable, n.o.s., not refrigerated liquid
3169	123	Gas sample, non-pressurized, poisonous, n.o.s., not refrigerated liquid
3169	123	Gas sample, non-pressurized, toxic, n.o.s., not refrigerated liquid
3170	138	Aluminum dross
3170	138	Aluminum processing by-products
3170	138	Aluminum remelting by-products
3170	138	Aluminum smelting by-products

ID Guide Name of Material No. No.			ID Guide Name of Material No. No.		
3171	154	Battery-powered equipment (wet battery)	3186	135	Self-heating liquid, inorganic, n.o.s.
3171	154	Battery-powered vehicle (wet battery)	3187	136	Self-heating liquid, poisonous, inorganic, n.o.s.
3171	154	Wheelchair, electric, with batteries	3187	136	Self-heating liquid, toxic, inorganic, n.o.s.
3172	153	Toxins, extracted from living sources, n.o.s.	3188	136	Self-heating liquid, corrosive, inorganic, n.o.s.
3174	135	Titanium disulfide	3189	135	Metal powder, self-heating, n.o.s.
3174	135	Titanium disulphide	3189	135	Self-heating metal powders, n.o.s.
3175	133	Solids containing flammable liquid, n.o.s.	3190	135	Self-heating solid, inorganic, n.o.s.
3176	133	Flammable solid, organic, molten, n.o.s.	3191	136	Self-heating solid, inorganic, poisonous, n.o.s.
3178	133	Flammable solid, inorganic, n.o.s.	3191	136	Self-heating solid, inorganic, toxic, n.o.s.
3178	133	Smokeless powder for small arms	3191	136	Self-heating solid, poisonous, inorganic, n.o.s.
3179	134	Flammable solid, poisonous, inorganic, n.o.s.	3191	136	Self-heating solid, toxic, inorganic, n.o.s.
3179	134	Flammable solid, toxic, inorganic, n.o.s.	3192	136	Self-heating solid, corrosive, inorganic, n.o.s.
3180	134	Flammable solid, corrosive, inorganic, n.o.s.	3194	135	Pyrophoric liquid, inorganic, n.o.s.
3180	134	Flammable solid, inorganic, corrosive, n.o.s.	3200	135	Pyrophoric solid, inorganic, n.o.s.
3181	133	Metal salts of organic compounds, flammable, n.o.s.	3203	135	Pyrophoric organometallic compound, n.o.s.
3182	170	Metal hydrides, flammable, n.o.s.	3205	135	Alkaline earth metal alcoholates, n.o.s.
3183	135	Self-heating liquid, organic, n.o.s.	3206	136	Alkali metal alcoholates, self-heating, corrosive, n.o.s.
3184	136	Self-heating liquid, poisonous, organic, n.o.s.	3207	138	Organometallic compound, water-reactive, flammable, n.o.s.
3184	136	Self-heating liquid, toxic, organic, n.o.s.			
3185	136	Self-heating liquid, corrosive, organic, n.o.s.			

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3207	138	Organometallic compound dispersion, water-reactive, flammable, n.o.s.
3207	138	Organometallic compound solution, water-reactive, flammable, n.o.s.
3208	138	Metallic substance, water-reactive, n.o.s.
3209	138	Metallic substance, water-reactive, self-heating, n.o.s.
3210	140	Chlorates, inorganic, aqueous solution, n.o.s.
3211	140	Perchlorates, inorganic, aqueous solution, n.o.s.
3212	140	Hypochlorites, inorganic, n.o.s.
3213	140	Bromates, inorganic, aqueous solution, n.o.s.
3214	140	Permanganates, inorganic, aqueous solution, n.o.s.
3215	140	Persulfates, inorganic, n.o.s.
3215	140	Persulphates, inorganic, n.o.s.
3216	140	Persulfates, inorganic, aqueous solution, n.o.s.
3216	140	Persulphates, inorganic, aqueous solution, n.o.s.
3217	140	Percarbonates, inorganic, n.o.s.
3218	140	Nitrates, inorganic, aqueous solution, n.o.s.
3219	140	Nitrites, inorganic, aqueous solution, n.o.s.
3220	126	Pentafluoroethane
3220	126	Refrigerant gas R-125
3221	149	Self-reactive liquid type B
3222	149	Self-reactive solid type B
3223	149	Self-reactive liquid type C
3224	149	Self-reactive solid type C
3225	149	Self-reactive liquid type D

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3226	149	Self-reactive solid type D
3227	149	Self-reactive liquid type E
3228	149	Self-reactive solid type E
3229	149	Self-reactive liquid type F
3230	149	Self-reactive solid type F
3231	150	Self-reactive liquid type B, temperature controlled
3232	150	Self-reactive solid type B, temperature controlled
3233	150	Self-reactive liquid type C, temperature controlled
3234	150	Self-reactive solid type C, temperature controlled
3235	150	Self-reactive liquid type D, temperature controlled
3236	150	Self-reactive solid type D, temperature controlled
3237	150	Self-reactive liquid type E, temperature controlled
3238	150	Self-reactive solid type E, temperature controlled
3239	150	Self-reactive liquid type F, temperature controlled
3240	150	Self-reactive solid type F, temperature controlled
3241	133	2-Bromo-2-nitropropane-1,3-diol
3242	149	Azodicarbonamide
3243	151	Solids containing poisonous liquid, n.o.s.
3243	151	Solids containing toxic liquid, n.o.s.
3244	154	Solids containing corrosive liquid, n.o.s.
3245	171	Genetically modified micro-organisms
3246	156	Methanesulfonyl chloride
3246	156	Methanesulphonyl chloride

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
3247	140	Sodium peroxoborate, anhydrous	3260	154	Corrosive solid, acidic, inorganic, n.o.s.
3248	131	Medicine, liquid, flammable, poisonous, n.o.s.	3261	154	Corrosive solid, acidic, organic, n.o.s.
3248	131	Medicine, liquid, flammable, toxic, n.o.s.	3262	154	Corrosive solid, basic, inorganic, n.o.s.
3249	151	Medicine, solid, poisonous, n.o.s.	3263	154	Corrosive solid, basic, organic, n.o.s.
3249	151	Medicine, solid, toxic, n.o.s.	3264	154	Corrosive liquid, acidic, inorganic, n.o.s.
3250	153	Chloroacetic acid, molten	3265	153	Corrosive liquid, acidic, organic, n.o.s.
3251	133	Isosorbide-5-mononitrate	3266	154	Corrosive liquid, basic, inorganic, n.o.s.
3252	115	Difluoromethane	3267	153	Corrosive liquid, basic, organic, n.o.s.
3252	115	Refrigerant gas R-32	3268	171	Air bag inflators
3253	154	Disodium trioxosilicate	3268	171	Air bag modules
3253	154	Disodium trioxosilicate, pentahydrate	3268	171	Seat-belt modules
3254	135	Tributylphosphane	3268	171	Seat-belt pre-tensioners
3254	135	Tributylphosphine	3269	127	Polyester resin kit
3255	135	tert-Butyl hypochlorite	3270	133	Nitrocellulose membrane filters
3256	128	Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8°C (100°F), at or above its flash point	3271	127	Ethers, n.o.s.
3256	128	Elevated temperature liquid, flammable, n.o.s., with flash point above 60.5°C (141°F), at or above its flash point	3272	127	Esters, n.o.s.
3257	128	Elevated temperature liquid, n.o.s., at or above 100°C (212°F) and below its flash point	3273	131	Nitriles, flammable, poisonous, n.o.s.
3258	171	Elevated temperature solid, n.o.s., at or above 240°C (464°F)	3273	131	Nitriles, flammable, toxic, n.o.s.
3259	154	Amines, solid, corrosive, n.o.s.	3274	127	Alcoholates solution, n.o.s., in alcohol
3259	154	Polyamines, solid, corrosive, n.o.s.	3275	131	Nitriles, poisonous, flammable, n.o.s.
			3275	131	Nitriles, toxic, flammable, n.o.s.
			3276	151	Nitriles, poisonous, n.o.s.
			3276	151	Nitriles, toxic, n.o.s.
			3277	154	Chloroformates, poisonous, corrosive, n.o.s.

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3277	154	Chloroformates, toxic, corrosive, n.o.s.
3278	151	Organophosphorus compound, poisonous, n.o.s.
3278	151	Organophosphorus compound, toxic, n.o.s.
3279	131	Organophosphorus compound, poisonous, flammable, n.o.s.
3279	131	Organophosphorus compound, toxic, flammable, n.o.s.
3280	151	Organoarsenic compound, n.o.s.
3281	151	Metal carbonyls, n.o.s.
3282	151	Organometallic compound, poisonous, n.o.s.
3282	151	Organometallic compound, toxic, n.o.s.
3283	151	Selenium compound, n.o.s.
3284	151	Tellurium compound, n.o.s.
3285	151	Vanadium compound, n.o.s.
3286	131	Flammable liquid, poisonous, corrosive, n.o.s.
3286	131	Flammable liquid, toxic, corrosive, n.o.s.
3287	151	Poisonous liquid, inorganic, n.o.s.
3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)
3287	151	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)
3287	151	Toxic liquid, inorganic, n.o.s.
3287	151	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)
3287	151	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)
3288	151	Poisonous solid, inorganic, n.o.s.

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3288	151	Toxic solid, inorganic, n.o.s.
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s.
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)
3289	154	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)
3289	154	Toxic liquid, corrosive, inorganic, n.o.s.
3289	154	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)
3289	154	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)
3290	154	Poisonous solid, corrosive, inorganic, n.o.s.
3290	154	Toxic solid, corrosive, inorganic, n.o.s.
3291	158	(Bio)Medical waste, n.o.s.
3291	158	Clinical waste, unspecified, n.o.s.
3291	158	Medical waste, n.o.s.
3291	158	Regulated medical waste, n.o.s.
3292	138	Batteries, containing Sodium
3292	138	Cells, containing Sodium
3293	152	Hydrazine, aqueous solution, with not more than 37% Hydrazine
3294	131	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide
3295	128	Hydrocarbons, liquid, n.o.s.
3296	126	Heptafluoropropane
3296	126	Refrigerant gas R-227

D Guide No. No.	Name of Material		ID Guide No. No.	Name of Material
297 126	Chlorotetrafluoroethane and Ethylene oxide mixture, with not more than 8.8% Ethylene oxide		3303 124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)
297 126	Ethylene oxide and Chlorotetrafluoroethane mixture, with not more than 8.8% Ethylene oxide		3303 124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)
298 126	Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide		3303 124	Compressed gas, toxic, oxidizing, n.o.s.
298 126	Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide		3303 124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)
298 126	Pentafluoroethane and Ethylene oxide mixture, with not more than 7.9% Ethylene oxide		3303 124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)
299 126	Ethylene oxide and Tetrafluoroethane mixture, with not more than 5.6% Ethylene oxide		3303 124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)
299 126	Tetrafluoroethane and Ethylene oxide mixture, with not more than 5.6% Ethylene oxide		3303 124	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)
300 119	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide		3304 123	Compressed gas, poisonous, corrosive, n.o.s.
300 119	Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide		3304 123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)
301 136	Corrosive liquid, self-heating, n.o.s.		3304 123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)
302 152	2-Dimethylaminoethyl acrylate		3304 123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)
303 124	Compressed gas, poisonous, oxidizing, n.o.s.		3304 123	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)
303 124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)		3304 123	Compressed gas, toxic, corrosive, n.o.s.
303 124	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)		3304 123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)

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3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)
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3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)
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3304	123	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)
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3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s.
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3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
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3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
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3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
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3305	119	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
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3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s.
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3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
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3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
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3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
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3305	119	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
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3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.
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ID No.	Guide No.	Name of Material
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3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
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3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
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3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
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3306	124	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
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3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s.
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3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
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3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
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3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
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3306	124	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
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3307	124	Liquefied gas, poisonous, oxidizing, n.o.s.
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3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)
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3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)
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3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)
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3307	124	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)
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ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
3307	124	Liquefied gas, toxic, oxidizing, n.o.s.	3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s.
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3307	124	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s.	3309	119	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s.
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)
3308	123	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)
3308	123	Liquefied gas, toxic, corrosive, n.o.s.	3309	119	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3308	123	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)

ID No.	Guide No.	Name of Material
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3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3310	124	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s.
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)
3310	124	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)
3311	122	Gas, refrigerated liquid, oxidizing, n.o.s.
3312	115	Gas, refrigerated liquid, flammable, n.o.s.
3313	135	Organic pigments, self-heating
3314	171	Plastic moulding compound
3315	151	Chemical sample, poisonous liquid
3315	151	Chemical sample, poisonous solid
3315	151	Chemical sample, toxic liquid
3315	151	Chemical sample, toxic solid
3316	171	Chemical kit
3316	171	First aid kit
3317	113	2-Amino-4,6-dinitrophenol, wetted with not less than 20% water

ID No.	Guide No.	Name of Material
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3318	125	Ammonia solution, with more than 50% Ammonia
3319	113	Nitroglycerin mixture with more than 2% but not more than 10% Nitroglycerin, desensitized
3320	157	Sodium borohydride and Sodium hydroxide solution, with not more than 12% Sodium borohydride and not more than 40% Sodium hydroxide
8000	171	Consumer commodity
8001	171	Dangerous goods in apparatus
8001	171	Dangerous goods in machinery
8013	171	Gas generator assemblies
8023	115	Refrigerating machines
8027	171	Other regulated substance
8037	140	Oxygen generators, small
8038	171	Heat producing article
9011	133	Camphene
9018	160	Dichlorodifluoroethylene
9026	153	Dinitrocyclohexylphenol
9035	123	Gas identification set
9037	151	Hexachloroethane
9069	132	Tetramethylmethylenediamine
9073	113	Trinitroaniline, wetted
9077	153	Adipic acid
9078	171	Aluminum sulfate, solid
9078	171	Aluminum sulphate, solid
9079	171	Ammonium acetate
9080	171	Ammonium benzoate
9081	171	Ammonium bicarbonate
9083	154	Ammonium carbamate
9084	154	Ammonium carbonate
9085	171	Ammonium chloride

D Guide Name of Material No. No.			ID Guide Name of Material No. No.		
086	143	Ammonium chromate	9120	171	Ferric fluoride
087	171	Ammonium citrate, dibasic	9121	171	Ferric sulfate
088	154	Ammonium fluoborate	9121	171	Ferric sulphate
089	171	Ammonium sulfamate	9122	171	Ferrous ammonium sulfate
089	171	Ammonium sulphamate	9122	171	Ferrous ammonium sulphate
090	171	Ammonium sulfite	9125	171	Ferrous sulfate
090	171	Ammonium sulphite	9125	171	Ferrous sulphate
091	171	Ammonium tartrate	9126	171	Fumaric acid
094	153	Benzoic acid	9127	171	Isopropanolamine dodecylbenzenesulfonate
095	171	n-Butyl phthalate	9127	171	Isopropanolamine dodecylbenzenesulphonate
096	171	Calcium chromate	9134	171	Lithium chromate
097	171	Calcium dodecylbenzenesulfonate	9137	171	Naphthenic acid
097	171	Calcium dodecylbenzenesulphonate	9138	171	Nickel ammonium sulfate
100	171	Chromic sulfate	9138	171	Nickel ammonium sulphate
100	171	Chromic sulphate	9139	171	Nickel chloride
101	171	Chromic acetate	9140	154	Nickel hydroxide
102	171	Chromous chloride	9141	154	Nickel sulfate
103	171	Cobaltous bromide	9141	154	Nickel sulphate
104	171	Cobaltous formate	9142	171	Potassium chromate
105	171	Cobaltous sulfamate	9145	171	Sodium chromate
105	171	Cobaltous sulphamate	9146	171	Sodium dodecylbenzenesulfonate (branched chain)
106	171	Cupric acetate	9146	171	Sodium dodecylbenzenesulphonate (branched chain)
109	171	Cupric sulfate	9147	171	Sodium phosphate, dibasic
109	171	Cupric sulphate	9148	171	Sodium phosphate, tribasic
110	171	Cupric sulfate, ammoniated	9149	171	Strontium chromate
110	171	Cupric sulphate, ammoniated	9151	171	Triethanolamine dodecylbenzenesulfonate
111	171	Cupric tartrate	9151	171	Triethanolamine dodecylbenzenesulphonate
117	171	EDTA			
117	171	Ethylenediaminetetraacetic acid			
118	171	Ferric ammonium citrate			
119	171	Ferric ammonium oxalate			

ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
9153	171	Zinc acetate	9199	142	Oxidizer, poisonous, liquid, n.o.s.
9154	171	Zinc ammonium chloride	9200	141	Oxidizer, poisonous, solid, n.o.s.
9155	171	Zinc borate	9201	171	Antimony trioxide
9156	171	Zinc bromide	9202	168	Carbon monoxide, refrigerated liquid (cryogenic liquid)
9157	171	Zinc carbonate	9206	137	Methyl phosphonic dichloride
9158	151	Zinc fluoride	9259	128	Elevated temperature material, liquid, n.o.s., (at or above 100°C (212°F) and below its flash point)
9159	171	Zinc formate	9260	169	Aluminum, molten
9160	171	Zinc phenolsulfonate	9263	156	Chloropivaloyl chloride
9160	171	Zinc phenolsulphonate	9264	151	3,5-Dichloro-2,4,6-trifluoropyridine
9161	171	Zinc sulfate	9269	132	Trimethoxysilane
9161	171	Zinc sulphate	9274	160	1,1-Dichloro-1-fluoroethane
9162	171	Zirconium potassium fluoride	9275	158	Regulated medical waste
9163	171	Zirconium sulfate	9276	128	Flammable liquids, elevated temperature material, n.o.s.
9163	171	Zirconium sulphate	9277	171	Oil, n.o.s., flash point not less than 93°C (200°F)
9180	162	Uranyl acetate	9278	171	Genetically modified organisms
9183	146	Organic peroxide, liquid, n.o.s.	9301	153	Waste Type 1
9183	146	Organic peroxide, solution, n.o.s.	9302	153	Waste Type 2
9187	146	Organic peroxide, solid, n.o.s.	9303	131	Waste Type 3
9188	171	Hazardous substance, liquid, n.o.s.	9304	153	Waste Type 4
9188	171	Hazardous substance, solid, n.o.s.	9305	131	Waste Type 5
9188	171	ORM-E, liquid, n.o.s.	9306	154	Waste Type 6
9188	171	ORM-E, solid, n.o.s.	9307	154	Waste Type 7
9189	171	Hazardous waste, liquid, n.o.s.	9308	153	Waste Type 8
9189	171	Hazardous waste, solid, n.o.s.	9309	153	Waste Type 9
9190	143	Ammonium permanganate	9310	153	Waste Type 10
9191	143	Chlorine dioxide, hydrate, frozen	9311	153	Waste Type 11
9192	167	Fluorine, refrigerated liquid (cryogenic liquid)			
9193	140	Oxidizer, corrosive, liquid, n.o.s.			
9194	140	Oxidizer, corrosive, solid, n.o.s.			
9195	135	Metal alkyl, solution, n.o.s.			

ID Guide Name of Material			ID Guide Name of Material		
No.	No.		No.	No.	
9312	153	Waste Type 12	9345	132	Waste Type 45
9313	153	Waste Type 13	9346	153	Waste Type 46
9314	153	Waste Type 14	9347	132	Waste Type 47
9315	153	Waste Type 15	9348	153	Waste Type 48
9316	154	Waste Type 16	9349	153	Waste Type 49
9317	154	Waste Type 17	9350	153	Waste Type 50
9318	154	Waste Type 18	9351	153	Waste Type 51
9319	154	Waste Type 19	9352	153	Waste Type 52
9320	154	Waste Type 20	9353	153	Waste Type 53
9321	154	Waste Type 21	9354	153	Waste Type 54
9322	154	Waste Type 22	9355	153	Waste Type 55
9323	154	Waste Type 23	9356	153	Waste Type 56
9324	152	Waste Type 24	9357	153	Waste Type 57
9325	127	Waste Type 25	9358	153	Waste Type 58
9326	152	Waste Type 26	9359	151	Waste Type 59
9327	131	Waste Type 27	9360	132	Waste Type 60
9328	131	Waste Type 28	9361	151	Waste Type 61
9329	153	Waste Type 29	9362	151	Waste Type 62
9330	153	Waste Type 30	9363	151	Waste Type 63
9331	129	Waste Type 31	9364	151	Waste Type 64
9332	129	Waste Type 32	9365	151	Waste Type 65
9333	129	Waste Type 33	9366	151	Waste Type 66
9334	129	Waste Type 34	9367	152	Waste Type 67
9335	153	Waste Type 35	9368	154	Waste Type 68
9336	153	Waste Type 36	9369	151	Waste Type 69
9337	153	Waste Type 37	9370	151	Waste Type 70
9338	153	Waste Type 38	9371	133	Waste Type 71
9339	153	Waste Type 39	9372	151	Waste Type 72
9340	153	Waste Type 40	9373	151	Waste Type 73
9341	132	Waste Type 41	9374	127	Waste Type 74
9342	129	Waste Type 42	9375	153	Waste Type 75
9343	154	Waste Type 43	9376	153	Waste Type 76
9344	132	Waste Type 44	9377	131	Waste Type 77

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9378	153	Waste Type 78
9379	153	Waste Type 79
9380	151	Waste Type 80
9381	154	Waste Type 81
9382	154	Waste Type 82
9383	154	Waste Type 83
9384	151	Waste Type 84
9385	154	Waste Type 85
9386	154	Waste Type 86
9387	154	Waste Type 87
9388	151	Waste Type 88
9389	154	Waste Type 89
9390	154	Waste Type 90
9391	153	Waste Type 91
9392	154	Waste Type 92
9393	153	Waste Type 93
9394	151	Waste Type 94
9395	153	Waste Type 95
9396	151	Waste Type 96
9397	153	Waste Type 97
9399	137	Waste Type 99
9400	137	Waste Type 100
9500	151	Leachable toxic waste

ID No.	Guide No.	Name of Material
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Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Accumulators, pressurized, pneumatic or hydraulic	126	1956	Acetylene tetrabromide	159	2504
Acetal	127	1088	Acetyl iodide	156	1898
Acetaldehyde	129	1089	Acetyl methyl carbinol	127	2621
Acetaldehyde ammonia	171	1841	Acetyl peroxide	148	2084
Acetaldehyde oxime	129	2332	Acid, liquid, n.o.s.	154	1760
Acetic acid, glacial	132	2789	Acid, sludge	153	1906
Acetic acid, solution, more than 10% but not more than 80% acid	153	2790	Acid butyl phosphate	153	1718
Acetic acid, solution, more than 80% acid	132	2789	Acridine	153	2713
Acetic anhydride	137	1715	Acrolein, inhibited	131P	1092
Acetone	127	1090	Acrolein dimer, stabilized	129P	2607
Acetone cyanohydrin, stabilized	155	1541	Acrylamide	153P	2074
Acetone oils	127	1091	Acrylic acid, inhibited	132P	2218
Acetonitrile	131	1648	Acrylonitrile, inhibited	131P	1093
Acetyl acetone peroxide	145	2080	Adhesives (flammable)	127	1133
Acetyl benzoyl peroxide	147	2081	Adipic acid	153	9077
Acetyl bromide	156	1716	Adiponitrile	153	2205
Acetyl chloride	132	1717	Aerosol dispensers	126	1950
Acetyl cyclohexanesulfonyl peroxide	148	2082	Aerosols	126	1950
Acetyl cyclohexanesulfonyl peroxide	148	2083	Air, compressed	122	1002
Acetyl cyclohexanesulphonyl peroxide	148	2082	Air, refrigerated liquid (cryogenic liquid)	122	1003
Acetyl cyclohexanesulphonyl peroxide	148	2083	Air, refrigerated liquid (cryogenic liquid), non- pressurized	122	1003
Acetylene	116	1001	Air bag inflators	133	1325
Acetylene, dissolved	116	1001	Air bag inflators	171	3268
Acetylene, Ethylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene.	116	3138	Air bag modules	133	1325
			Air bag modules	171	3268
			Aircraft evacuation slides	171	2990
			Aircraft hydraulic power unit fuel tank	131	3165
			Aircraft survival kits	171	3072
			Alcoholates solution, n.o.s., in alcohol	127	3274

Name of Material	Guide ID No.	No.
Alcoholic beverages	127	3065
Alcohols, flammable, poisonous, n.o.s.	131	1986
Alcohols, flammable, toxic, n.o.s.	131	1986
Alcohols, n.o.s.	127	1987
Alcohols, poisonous, n.o.s.	131	1986
Alcohols, toxic, n.o.s.	131	1986
Aldehydes, flammable, poisonous, n.o.s.	131	1988
Aldehydes, flammable, toxic, n.o.s.	131	1988
Aldehydes, n.o.s.	129	1989
Aldehydes, poisonous, n.o.s.	131	1988
Aldehydes, toxic, n.o.s.	131	1988
Aldol	153	2839
Aldrin, liquid	131	2762
Aldrin, solid	151	2761
Aldrin mixture, dry	151	2761
Aldrin mixture, liquid	131	2762
Alkali metal alcoholates, self-heating, corrosive, n.o.s.	136	3206
Alkali metal alloy, liquid, n.o.s.	138	1421
Alkali metal amalgam	138	1389
Alkali metal amides	139	1390
Alkali metal dispersion	138	1391
Alkaline earth metal alcoholates, n.o.s.	135	3205
Alkaline earth metal alloy, n.o.s.	138	1393
Alkaline earth metal amalgam	138	1392
Alkaline earth metal dispersion	138	1391
Alkaline liquid, n.o.s.	154	1719
Alkaloids, liquid, n.o.s. (poisonous)	151	3140

Name of Material	Guide ID No.	No.
Alkaloids, solid, n.o.s. (poisonous)	151	1544
Alkaloid salts, liquid, n.o.s. (poisonous)	151	3140
Alkaloid salts, solid, n.o.s. (poisonous)	151	1544
Alkylamines, n.o.s.	132	2733
Alkylamines, n.o.s.	132	2734
Alkylamines, n.o.s.	153	2735
Alkyl phenols, liquid, n.o.s. (including C2-C12 homologues)	153	3145
Alkyl phenols, solid, n.o.s. (including C2-C12 homologues)	153	2430
Alkyl sulfonic acids, liquid, with more than 5% free Sulfuric acid	153	2584
Alkyl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	153	2586
Alkyl sulfonic acids, solid, with more than 5% free Sulfuric acid	153	2583
Alkyl sulfonic acids, solid, with not more than 5% free Sulfuric acid	153	2585
Alkylsulfuric acids	156	2571
Alkyl sulphonic acids, liquid, with more than 5% free Sulphuric acid	153	2584
Alkyl sulphonic acids, liquid, with not more than 5% free Sulphuric acid	153	2586
Alkyl sulphonic acids, solid, with more than 5% free Sulphuric acid	153	2583

Name of Material		Guide ID No. No.		Name of Material		Guide ID No. No.	
Alkyl sulphonic acids, solid, with not more than 5% free Sulphuric acid	153	2585		Aluminum nitrate		140	1438
Alkylsulphuric acids	156	2571		Aluminum phosphate, solution		154	1760
Allethrin	151	2902		Aluminum phosphide		139	1397
Allyl acetate	131	2333		Aluminum phosphide pesticide		157	3048
Allyl alcohol	131	1098		Aluminum powder, coated		170	1309
Allylamine	131	2334		Aluminum powder, pyrophoric		135	1383
Allyl bromide	131	1099		Aluminum powder, uncoated		138	1396
Allyl chloride	131	1100		Aluminum processing by-products		138	3170
Allyl chlorocarbonate	155	1722		Aluminum remelting by-products		138	3170
Allyl chloroformate	155	1722		Aluminum resinate		133	2715
Allyl ethyl ether	131	2335		Aluminum silicon powder, uncoated		138	1398
Allyl formate	131	2336		Aluminum smelting by-products		138	3170
Allyl glycidyl ether	129	2219		Aluminum sulfate, solid		171	9078
Allyl iodide	132	1723		Aluminum sulfate, solution		154	1760
Allyl isothiocyanate, inhibited	155	1545		Aluminum sulphate, solid		171	9078
Allyl isothiocyanate, stabilized	155	1545		Aluminum sulphate, solution		154	1760
Allyltrichlorosilane, stabilized	155	1724		Amines, flammable, corrosive, n.o.s.		132	2733
Aluminum, molten	169	9260		Amines, liquid, corrosive, flammable, n.o.s.		132	2734
Aluminum alkyl halides	135	3052		Amines, liquid, corrosive, n.o.s.		153	2735
Aluminum alkyl hydrides	138	3076		Amines, solid, corrosive, n.o.s.		154	3259
Aluminum alkyls	135	3051		2-Amino-4-chlorophenol		151	2673
Aluminum borohydride	135	2870		2-Amino-5-diethylaminopentane		153	2946
Aluminum borohydride in devices	135	2870		2-Amino-4,6-dinitrophenol, wetted with not less than 20% water		113	3317
Aluminum bromide, anhydrous	137	1725		2-(2-Aminoethoxy)ethanol		154	1760
Aluminum bromide, solution	154	2580		2-(2-Aminoethoxy)ethanol		153	3055
Aluminum carbide	138	1394		N-Aminoethylpiperazine		153	2815
Aluminum chloride, anhydrous	137	1726		Aminophenols		152	2512
Aluminum chloride, solution	154	2581		Aminopropyldiethanolamine		154	1760
Aluminum dross	138	3170					
Aluminum ferrosilicon powder	139	1395					
Aluminum hydride	138	2463					

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
N-Aminopropylmorpholine	154 1760	Ammonium hydrogendifluoride, solid	154 172
Aminopyridines	153 2671	Ammonium hydrogendifluoride, solution	154 281
Ammonia, anhydrous	125 1005	Ammonium hydrogen fluoride, solid	154 172
Ammonia, anhydrous, liquefied	125 1005	Ammonium hydrogen fluoride, solution	154 281
Ammonia, solution, with more than 10% but not more than 35% Ammonia	154 2672	Ammonium hydrogen sulfate	154 250
Ammonia, solution, with more than 35% but not more than 50% Ammonia	125 2073	Ammonium hydrogen sulphate	154 250
Ammonia solution, with more than 50% Ammonia	125 1005	Ammonium hydrosulfide, solution	132 268
Ammonia solution, with more than 50% Ammonia	125 3318	Ammonium hydrosulphide, solution	132 268
Ammonium acetate	171 9079	Ammonium hydroxide	154 267
Ammonium arsenate	151 1546	Ammonium hydroxide, with more than 10% but not more than 35% Ammonia	154 267
Ammonium benzoate	171 9080	Ammonium metavanadate	154 285
Ammonium bicarbonate	171 9081	Ammonium nitrate, liquid (hot concentrated solution)	140 242
Ammonium bifluoride, solid	154 1727	Ammonium nitrate, with not more than 0.2% combustible substances	140 194
Ammonium bifluoride, solution	154 2817	Ammonium nitrate, with organic coating	140 194
Ammonium bisulfite, solid	154 2693	Ammonium nitrate fertilizer, n.o.s.	140 207
Ammonium bisulfite, solution	154 2693	Ammonium nitrate fertilizer, with not more than 0.4% combustible material	140 207
Ammonium bisulphite, solid	154 2693	Ammonium nitrate fertilizers	140 206
Ammonium bisulphite, solution	154 2693	Ammonium nitrate fertilizers	140 207
Ammonium carbamate	154 9083	Ammonium nitrate fertilizers	140 207
Ammonium carbonate	154 9084	Ammonium nitrate fertilizers, with Ammonium sulfate	140 206
Ammonium chloride	171 9085	Ammonium nitrate fertilizers, with Ammonium sulphate	140 206
Ammonium chromate	143 9086		
Ammonium citrate, dibasic	171 9087		
Ammonium dichromate	141 1439		
Ammonium dinitro-o-cresolate	141 1843		
Ammonium fluoborate	154 9088		
Ammonium fluoride	154 2505		
Ammonium fluorosilicate	151 2854		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Ammonium nitrate fertilizers, with Calcium carbonate	140	2068	Amyl acetates	129	1104
Ammonium nitrate fertilizers, with Phosphate or Potash	143	2070	Amyl acid phosphate	153	2819
Ammonium nitrate-fuel oil mixtures	112	—	Amyl alcohols	129	1105
Ammonium nitrate mixed fertilizers	140	2069	Amylamines	132	1106
Ammonium oxalate	154	2449	Amyl butyrates	130	2620
Ammonium perchlorate	143	1442	Amyl chloride	129	1107
Ammonium permanganate	143	9190	n-Amylene	127	1108
Ammonium persulfate	140	1444	Amyl formates	129	1109
Ammonium persulphate	140	1444	Amyl mercaptan	130	1111
Ammonium picrate, wetted with not less than 10% water	113	1310	n-Amyl methyl ketone	127	1110
Ammonium polysulfide, solution	154	2818	Amyl methyl ketone	127	1110
Ammonium polysulphide, solution	154	2818	Amyl nitrate	140	1112
Ammonium polyvanadate	151	2861	Amyl nitrite	129	1113
Ammonium silicofluoride	151	2854	tert-Amyl peroxy-2- ethylhexanoate	148	2898
Ammonium sulfamate	171	9089	tert-Amyl peroxyneodecanoate	148	2891
Ammonium sulfate nitrate	140	1477	Amyltrichlorosilane	155	1728
Ammonium sulfide, solution	132	2683	Anhydrous ammonia	125	1005
Ammonium sulfite	171	9090	Anhydrous ammonia, liquefied	125	1005
Ammonium sulphamate	171	9089	Aniline	153	1547
Ammonium sulphate nitrate	140	1477	Aniline hydrochloride	153	1548
Ammonium sulphide, solution	132	2683	Anisidines	153	2431
Ammonium sulphite	171	9090	Anisidines, liquid	153	2431
Ammonium sulphamate	171	9089	Anisidines, solid	153	2431
Ammonium sulphate nitrate	140	1477	Anisole	127	2222
Ammonium sulphide, solution	132	2683	Anisoyl chloride	156	1729
Ammonium sulphite	171	9090	Antimony compound, inorganic, liquid, n.o.s.	157	3141
Ammonium tartrate	171	9091	Antimony compound, inorganic, n.o.s.	157	1549
Ammunition, poisonous, non-explosive	151	2016	Antimony compound, inorganic, solid, n.o.s.	157	1549
Ammunition, tear-producing, non-explosive	159	2017	Antimony lactate	151	1550
Ammunition, toxic, non-explosive	151	2016	Antimony pentachloride, liquid	157	1730

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Antimony pentachloride, solution	157 1731	Arsenical pesticide, liquid, toxic, flammable	131 2993
Antimony pentafluoride	157 1732	Arsenical pesticide, solid, poisonous	151 2753
Antimony potassium tartrate	151 1551	Arsenical pesticide, solid, toxic	151 2753
Antimony powder	170 2871	Arsenic bromide	151 1553
Antimony sulfide, solid	133 1325	Arsenic chloride	157 1560
Antimony sulphide, solid	133 1325	Arsenic compound, liquid, n.o.s.	152 1558
Antimony tribromide, solid	157 1549	Arsenic compound, liquid, n.o.s., inorganic	152 1558
Antimony tribromide, solution	157 1549	Arsenic compound, solid, n.o.s.	152 1557
Antimony trichloride	157 1733	Arsenic compound, solid, n.o.s., inorganic	152 1557
Antimony trichloride, liquid	157 1733	Arsenic iodide, solid	152 1557
Antimony trichloride, solid	157 1733	Arsenic pentoxide	151 1559
Antimony trichloride, solution	157 1733	Arsenic sulfide	152 1557
Antimony trifluoride, solid	157 1549	Arsenic sulphide	152 1557
Antimony trifluoride, solution	157 1549	Arsenic trichloride	157 1560
Antimony trioxide	171 9201	Arsenic trioxide	151 1560
Aqua regia	157 1798	Arsenic trisulfide	152 1557
Argon	121 1006	Arsenic trisulphide	152 1557
Argon, compressed	121 1006	Arsine	119 2188
Argon, refrigerated liquid (cryogenic liquid)	120 1951	Articles containing Polychlorinated biphenyls (PCB)	171 2311
Arsenic	152 1558	Articles, pressurized, hydraulic (containing non-flammable gas)	126 3160
Arsenic acid, liquid	154 1553	Articles, pressurized, pneumatic (containing non-flammable gas)	126 3160
Arsenic acid, solid	154 1554	Aryl sulfonic acids, liquid, with more than 5% free Sulfuric acid	153 258
Arsenical dust	152 1562	Aryl sulfonic acids, liquid, with not more than 5% free Sulfuric acid	153 258
Arsenical pesticide, liquid, flammable, poisonous	131 2760		
Arsenical pesticide, liquid, flammable, toxic	131 2760		
Arsenical pesticide, liquid, poisonous	151 2994		
Arsenical pesticide, liquid, poisonous, flammable	131 2993		
Arsenical pesticide, liquid, toxic	151 2994		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Aryl sulfonic acids, solid, with more than 5% free Sulfuric acid	153	2583	Barium	138	1400
Aryl sulfonic acids, solid, with not more than 5% free Sulfuric acid	153	2585	Barium alloys, pyrophoric	135	1854
Aryl sulphonic acids, liquid, with more than 5% free Sulphuric acid	153	2584	Barium azide, wetted with not less than 50% water	113	1571
Aryl sulphonic acids, liquid, with not more than 5% free Sulphuric acid	153	2586	Barium bromate	141	2719
Aryl sulphonic acids, solid, with more than 5% free Sulphuric acid	153	2583	Barium chlorate	141	1445
Aryl sulphonic acids, solid, with not more than 5% free Sulphuric acid	153	2585	Barium chlorate, wet	141	1445
Asbestos	171	2212	Barium compound, n.o.s.	154	1564
Asbestos, blue	171	2212	Barium cyanide	157	1565
Asbestos, brown	171	2212	Barium hypochlorite, with more than 22% available Chlorine	141	2741
Asbestos, white	171	2590	Barium nitrate	141	1446
Asphalt	130	1999	Barium oxide	157	1884
Asphalt, cut back	130	1999	Barium perchlorate	141	1447
Azinphos methyl	152	2783	Barium permanganate	141	1448
-Aziridinyl phosphine oxide (Tris)	152	2501	Barium peroxide	141	1449
Azodicarbonamide	149	3242	Barium selenate	151	2630
2,2'-Azodi-(2,4-dimethyl-4-methoxyvaleronitrile)	150	2955	Barium selenite	151	2630
2,2'-Azodi-(2,4-dimethylvaleronitrile)	150	2953	Batteries, containing Sodium	138	3292
1'-Azodi-(hexahydrobenzonitrile)	149	2954	Batteries, dry, containing Potassium hydroxide, solid	154	3028
Azodiisobutyronitrile	150	2952	Batteries, wet, filled with acid	154	2794
2,2'-Azodi-(2-methyl-butyronitrile)	150	3030	Batteries, wet, filled with alkali	154	2795
			Batteries, wet, non-spillable	154	2800
			Battery	154	1813
			Battery	154	2794
			Battery	154	2795
			Battery fluid, acid	157	2796
			Battery fluid, acid, with battery	157	2796
			Battery fluid, acid, with electronic equipment or actuating device	157	2796
			Battery fluid, alkali	154	2797

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Battery fluid, alkali, with battery	154 2797	Benzoic derivative pesticide, solid, toxic	151 276
Battery fluid, alkali, with electronic equipment or actuating device	154 2797	Benzonitrile	152 222
Battery-powered equipment (wet battery)	154 3171	Benzoquinone	153 258
Battery-powered vehicle (wet battery)	154 3171	Benzotrichloride	156 222
Benzaldehyde	129 1989	Benzotrifluoride	131 233
Benzaldehyde	129 1990	Benzoyl chloride	137 173
Benzene	130 1114	Benzoyl peroxide	146 208
Benzene-1,3-disulfohydrazide	149 2971	Benzoyl peroxide	146 208
Benzene-1,3-disulphohydrazide	149 2971	Benzoyl peroxide	146 208
Benzene phosphorus dichloride	137 2798	Benzoyl peroxide	145 208
Benzene phosphorus thiodichloride	137 2799	Benzoyl peroxide	146 209
Benzene sulfohydrazide	149 2970	Benzyl bromide	156 173
Benzenesulfonyl chloride	156 2225	Benzyl chloride	156 173
Benzene sulphohydrazide	149 2970	Benzyl chloroformate	137 173
Benzenesulphonyl chloride	156 2225	Benzyl dimethylamine	132 261
Benzidine	153 1885	4-[Benzyl(ethyl)amino]-3- ethoxybenzenediazonium zinc chloride	149 303
Benzoic acid	153 9094	Benzylidene chloride	156 188
Benzoic derivative pesticide, liquid, flammable, poisonous	131 2770	Benzyl iodide	156 265
Benzoic derivative pesticide, liquid, flammable, toxic	131 2770	4-[Benzyl(methyl)amino]-3- ethoxybenzenediazonium zinc chloride	150 303
Benzoic derivative pesticide, liquid, poisonous	151 3004	Beryllium chloride	154 156
Benzoic derivative pesticide, liquid, poisonous, flammable	131 3003	Beryllium compound, n.o.s.	154 156
Benzoic derivative pesticide, liquid, toxic	151 3004	Beryllium fluoride	154 156
Benzoic derivative pesticide, liquid, toxic, flammable	131 3003	Beryllium nitrate	141 246
Benzoic derivative pesticide, solid, poisonous	151 2769	Beryllium powder	134 156
		Bhusa, wet, damp or contaminated with oil	133 132
		Bicyclo[2.2.1]hepta-2,5-diene	127P 225
		Bicyclo[2.2.1]hepta-2,5-diene, inhibited	127P 225
		Bifluorides, n.o.s.	154 174

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Bio)Medical waste, n.o.s.	158 3291	Boron trichloride	125 1741
pyridilium pesticide, liquid, flammable, poisonous	131 2782	Boron trifluoride	125 1008
pyridilium pesticide, liquid, flammable, toxic	131 2782	Boron trifluoride, compressed	125 1008
pyridilium pesticide, liquid, poisonous	151 3016	Boron trifluoride, dihydrate	157 2851
pyridilium pesticide, liquid, poisonous, flammable	131 3015	Boron trifluoride acetic acid complex	155 1742
pyridilium pesticide, liquid, toxic	151 3016	Boron trifluoride diethyl etherate	132 2604
pyridilium pesticide, liquid, toxic, flammable	131 3015	Boron trifluoride dimethyl etherate	139 2965
pyridilium pesticide, solid, poisonous	151 2781	Boron trifluoride propionic acid complex	156 1743
pyridilium pesticide, solid, toxic	151 2781	Brake fluid, hydraulic	130 1118
sulfates, aqueous solution	154 2837	Bromates, inorganic, aqueous solution, n.o.s.	140 3213
sulfites, aqueous solution, n.o.s.	154 2693	Bromates, inorganic, n.o.s.	141 1450
sulfites, inorganic, aqueous solutions, n.o.s.	154 2693	Bromine	154 1744
sulphates, aqueous solution	154 2837	Bromine, solution	154 1744
sulphites, aqueous solution, n.o.s.	154 2693	Bromine chloride	124 2901
sulphites, inorganic, aqueous solutions, n.o.s.	154 2693	Bromine pentafluoride	144 1745
lasting agent, n.o.s.	112 —	Bromine trifluoride	144 1746
leaching powder	140 2208	Bromoacetic acid	156 1938
blue asbestos	171 2212	Bromoacetic acid, solid	156 1938
ombs, smoke, non-explosive, with corrosive liquid, without initiating device	153 2028	Bromoacetic acid, solution	156 1938
orate and Chlorate mixtures	140 1458	Bromoacetone	131 1569
orneol	133 1312	Bromoacetyl bromide	156 2513
oron tribromide	157 2692	Bromobenzene	129 2514
		Bromobenzyl cyanides	159 1694
		1-Bromobutane	129 1126
		2-Bromobutane	130 2339
		Bromochlorodifluoromethane	126 1974
		Bromochloromethane	160 1887
		1-Bromo-3-chloropropane	159 2688
		2-Bromoethyl ethyl ether	130 2340
		Bromoform	159 2515

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
1-Bromo-3-methylbutane	130	2341	tert-Butyl cumyl peroxide	145	209
Bromomethylpropanes	130	2342	tert-Butylcyclohexyl chloroformate	156	274
2-Bromo-2-nitropropane-1,3-diol	133	3241	n-Butyl-4,4-di-(tert- butylperoxy)valerate	146	214
2-Bromopentane	130	2343	n-Butyl-4,4-di-(tert- butylperoxy)valerate	145	214
2-Bromopropane	132	2344	Butylene	115	101
Bromopropanes	132	2344	Butylene	115	107
3-Bromopropyne	132	2345	1,2-Butylene oxide, stabilized	127P	302
Bromotrifluoroethylene	116	2419	Butyl ethers	127	114
Bromotrifluoromethane	126	1009	n-Butyl formate	129	112
Brown asbestos	171	2212	tert-Butyl hydroperoxide	147	209
Brucine	152	1570	tert-Butyl hydroperoxide	147	209
Burnt cotton, not picked	133	1325	tert-Butyl hydroperoxide, not more than 80% in Di-tert-butyl peroxide and/or solvent	147	209
Butadienes, inhibited	116P	1010	tert-Butyl hypochlorite	135	325
Butane	115	1011	N,n-Butyl imidazole	152	269
Butane	115	1075	n-Butyl isocyanate	155	248
Butanedione	127	2346	tert-Butyl isocyanate	155	248
Butane mixture	115	1011	tert-Butyl isopropyl benzene hydroperoxide	145	209
Butane mixture	115	1075	Butyl mercaptan	130	234
Butanols	129	1120	n-Butyl methacrylate	129P	222
Butoxyl	127	2708	n-Butyl methacrylate, inhibited	129P	222
Butyl acetates	129	1123	Butyl methyl ether	127	235
Butyl acid phosphate	153	1718	tert-Butyl monoperoxymaleate	146	209
Butyl acrylate	129P	2348	Butyl nitrites	129	235
Butyl acrylates, inhibited	129P	2348	tert-Butyl peroxyacetate	146	209
Butyl alcohol	129	1120	tert-Butyl peroxyacetate	146	209
n-Butylamine	132	1125	tert-Butyl peroxybenzoate	146	209
N-Butylaniline	153	2738	tert-Butyl peroxybenzoate	145	209
Butylbenzenes	128	2709	tert-Butyl peroxybenzoate	145	289
n-Butyl bromide	129	1126			
Butyl chloride	130	1127			
n-Butyl chloroformate	155	2743			
sec-Butyl chloroformate	155	2742			
tert-Butyl cumene peroxide	145	2091			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
tert-Butyl peroxyacrylate	145 2183	5-tert-Butyl-2,4,6-trinitro- m-xylene	149 2956
tert-Butyl peroxydicarbonate	148 2169	Butyl vinyl ether, inhibited	127P 2352
tert-Butyl peroxydicarbonate	148 2170	1,4-Butynediol	153 2716
tert-Butyl peroxydiethylacetate	148 2144	Butyraldehyde	129 1129
tert-Butyl peroxydiethylacetate, with tert-Butyl peroxybenzoate	145 2551	Butyraldoxime	129 2840
tert-Butyl peroxy-2- ethylhexanoate	148 2143	Butyric acid	153 2820
tert-Butyl peroxy-2- ethylhexanoate, not more than 50%, with phlegmatizer	148 2888	Butyric anhydride	156 2739
tert-Butyl peroxy-2- ethylhexanoate, with 2,2-Di- (tert-butylperoxy)butane	148 2886	Butyronitrile	131 2411
tert-Butyl peroxy-2- ethylhexanoate, with 2,2-Di- (tert-butylperoxy)butane	145 2887	Butyryl chloride	132 2353
tert-Butyl peroxyisobutyrate	148 2142	Cacodylic acid	151 1572
tert-Butyl peroxyisobutyrate	148 2562	Cadmium compound	154 2570
tert-Butyl peroxyisononanoate	145 2104	Caesium	138 1407
tert-Butyl peroxyisopropyl carbonate	146 2103	Caesium hydroxide	157 2682
tert-Butyl peroxyneodecanoate	148 2177	Caesium hydroxide, solution	154 2681
tert-Butyl peroxyneodecanoate	148 2594	Caesium nitrate	140 1451
tert-Butyl peroxy-3- phenylphthalide	145 2596	Calcium	138 1401
tert-Butyl peroxyphenylacetate	148 2110	Calcium, metal and alloys, pyrophoric	135 1855
tert-Butyl peroxy-3,5,5- trimethylhexanoate	145 2104	Calcium, pyrophoric	135 1855
tert-Butyl phenols, liquid	153 2228	Calcium alloys, pyrophoric	135 1855
tert-Butyl phenols, solid	153 2229	Calcium arsenate	151 1573
tert-Butyl phthalate	171 9095	Calcium arsenate and Calcium arsenite mixture, solid	151 1574
tert-Butyl propionates	130 1914	Calcium arsenite, solid	151 1574
tert-Butyltoluenes	131 2667	Calcium arsenite and Calcium arsenate mixture, solid	151 1574
tert-Butyltrichlorosilane	155 1747	Calcium carbide	138 1402
		Calcium chlorate	140 1452
		Calcium chlorate, aqueous solution	140 2429
		Calcium chlorate, solution	140 2429
		Calcium chlorite	140 1453
		Calcium chromate	171 9096

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Calcium cyanamide, with more than 0.1% Calcium carbide	138 1403	Calcium peroxide	140 145
Calcium cyanide	157 1575	Calcium phosphide	139 136
Calcium dithionite	135 1923	Calcium resinate	133 131
Calcium dodecylbenzenesulfonate	171 9097	Calcium resinate, fused	133 131
Calcium dodecylbenzenesulphonate	171 9097	Calcium selenate	151 263
Calcium hydride	138 1404	Calcium silicide	138 140
Calcium hydrogen sulfite, solution	154 2693	Calcium silicon	138 140
Calcium hydrogen sulphite, solution	154 2693	Camphene	133 901
Calcium hydrosulfite	135 1923	Camphor	133 271
Calcium hydrosulphite	135 1923	Camphor, synthetic	133 271
Calcium hypochlorite, dry	140 1748	Camphor oil	128 113
Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 10% water	140 2880	Caproic acid	153 282
Calcium hypochlorite, hydrated mixture, with not less than 5.5% but not more than 10% water	140 2880	Caprylyl peroxide	148 212
Calcium hypochlorite mixture, dry, with more than 10% but not more than 39% available Chlorine	140 2208	Caprylyl peroxide, solution	148 212
Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	140 1748	Carbamate pesticide, liquid, flammable, poisonous	131 275
Calcium manganese silicon	138 2844	Carbamate pesticide, liquid, flammable, toxic	131 275
Calcium metal, crystalline	138 1401	Carbamate pesticide, liquid, poisonous	151 299
Calcium nitrate	140 1454	Carbamate pesticide, liquid, poisonous, flammable	131 299
Calcium oxide	157 1910	Carbamate pesticide, liquid, toxic	151 299
Calcium perchlorate	140 1455	Carbamate pesticide, liquid, toxic, flammable	131 299
Calcium permanganate	140 1456	Carbamate pesticide, solid, poisonous	151 275
		Carbamate pesticide, solid, toxic	151 275
		Carbaryl	151 275
		Carbofuran	151 275
		Carbon, activated	133 136
		Carbon, animal or vegetable origin	133 136

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Carbon bisulfide	131 1131	Carbon monoxide, refrigerated liquid (cryogenic liquid)	168 9202
Carbon bisulphide	131 1131	Carbon tetrabromide	151 2516
Carbon dioxide	120 1013	Carbon tetrachloride	151 1846
Carbon dioxide, compressed	120 1013	Carbonyl fluoride	125 2417
Carbon dioxide, refrigerated liquid	120 2187	Carbonyl fluoride, compressed	125 2417
Carbon dioxide, solid	120 1845	Carbonyl sulfide	119 2204
Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide	115 1041	Carbonyl sulphide	119 2204
Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide	119 3300	Cargo transport unit under fumigation	171 —
Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide	115 1041	Castor beans, meal, pomace or flake	171 2969
Carbon dioxide and Ethylene oxide mixtures, with not more than 6% Ethylene oxide	126 1952	Caustic alkali liquid, n.o.s.	154 1719
Carbon dioxide and Ethylene oxide mixtures, with not more than 9% Ethylene oxide	126 1952	Caustic potash, dry, solid	154 1813
Carbon dioxide and Nitrous oxide mixture	126 1015	Caustic potash, liquid	154 1814
Carbon dioxide and Oxygen mixture	122 1014	Caustic potash, solution	154 1814
Carbon dioxide and Oxygen mixture, compressed	122 1014	Caustic soda, bead	154 1823
Carbon disulfide	131 1131	Caustic soda, flake	154 1823
Carbon disulphide	131 1131	Caustic soda, granular	154 1823
Carbon monoxide	119 1016	Caustic soda, solid	154 1823
Carbon monoxide, compressed	119 1016	Caustic soda, solution	154 1824
Carbon monoxide and Hydrogen mixture	119 2600	Cells, containing Sodium	138 3292
Carbon monoxide and Hydrogen mixture, compressed	119 2600	Celluloid, in blocks, rods, rolls, sheets, tubes, etc., except scrap	133 2000
		Celluloid, scrap	135 2002
		Cement (flammable)	127 1133
		Cement, container, linoleum, tile or wallboard, liquid	127 1133
		Cement, leather	127 1133
		Cement, liquid, n.o.s.	127 1133
		Cement, pyroxylin	127 1133
		Cement, roofing, liquid	127 1133
		Cement, rubber	127 1133

Name of Material	Guide ID No.	No.
Cerium, slabs, ingots or rods	170	1333
Cerium, turnings or gritty powder	138	3078
Cesium	138	1407
Cesium hydroxide	157	2682
Cesium hydroxide, solution	154	2681
Cesium nitrate	140	1451
Charcoal	133	1361
Charcoal, briquettes	133	1361
Charcoal, shell	133	1361
Charcoal, wood, ground, crushed, granulated or pulverized	133	1361
Charcoal screenings, made from "Pinon" wood	133	1361
Charcoal screenings, other than "Pinon" wood screenings	133	1361
Chemical kit	154	1760
Chemical kit	171	3316
Chemical kits,(containing corrosive substances)	154	—
Chemical kits (containing flammable liquids)	128	—
Chemical kits (containing flammable solids)	133	—
Chemical kits (containing oxidizing substances)	140	—
Chemical kits (containing poisonous liquids)	153	—
Chemical kits (containing poisonous solids)	154	—
Chemical kits (containing toxic liquids)	153	—
Chemical kits (containing toxic solids)	154	—
Chemical sample, poisonous liquid	151	3315

Name of Material	Guide ID No.	No.
Chemical sample, poisonous solid	151	3315
Chemical sample, toxic liquid	151	3315
Chemical sample, toxic solid	151	3315
Chloral, anhydrous, inhibited	153	2075
Chlorate, n.o.s., wet	140	1461
Chlorate and Borate mixtures	140	1458
Chlorate and Magnesium chloride mixture	140	1459
Chlorates, inorganic, aqueous solution, n.o.s.	140	3210
Chlorates, inorganic, n.o.s.	140	1461
Chloric acid	140	2626
Chloric acid, aqueous solution, with not more than 10% Chloric acid	140	2626
Chlorine	124	1017
Chlorine dioxide, hydrate, frozen	143	9191
Chlorine pentafluoride	124	2548
Chlorine trifluoride	124	1749
Chlorite solution	154	1908
Chlorite solution, with more than 5% available Chlorine	154	1908
Chlorites, inorganic, n.o.s.	143	1462
Chloroacetaldehyde	153	2232
Chloroacetic acid, liquid	153	1750
Chloroacetic acid, molten	153	3250
Chloroacetic acid, solid	153	1751
Chloroacetic acid, solution	153	1750
Chloroacetone, stabilized	131	1695
Chloroacetonitrile	131	2668
Chloroacetophenone	153	1697
Chloroacetophenone, liquid	153	1697
Chloroacetophenone, solid	153	1697

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Chloroacetyl chloride	156	1752	Chloroformates, toxic, corrosive, flammable, n.o.s.	155	2742
Chloroanilines, liquid	152	2019	Chloroformates, toxic, corrosive, n.o.s.	154	3277
Chloroanilines, solid	152	2018	1-Chloroheptane	129	—
Chloroanisidines	152	2233	1-Chlorohexane	129	—
Chlorobenzene	130	1134	Chloromethyl chloroformate	157	2745
Chlorobenzotrifluorides	130	2234	Chloromethyl ethyl ether	131	2354
-Chlorobenzoyl peroxide	146	2113	3-Chloro-4-methylphenyl isocyanate	156	2236
-Chlorobenzoyl peroxide	145	2114	Chloronitroanilines	153	2237
-Chlorobenzoyl peroxide	145	2115	Chloronitrobenzenes	152	1578
Chlorobenzyl chlorides	153	2235	Chloronitrobenzenes, liquid	152	1578
-Chloro-3-bromopropane	159	2688	Chloronitrobenzenes, solid	152	1578
Chlorobutanes	130	1127	Chloronitrotoluenes	152	2433
Chlorocresols	152	2669	Chloronitrotoluenes, liquid	152	2433
Chlorocresols, liquid	152	2669	Chloronitrotoluenes, solid	152	2433
Chlorocresols, solid	152	2669	Chloropentafluoroethane	126	1020
-Chloro-4-diethylamino- benzenediazonium zinc chloride	149	3033	Chloropentafluoroethane and Chlorodifluoromethane mixture	126	1973
Chlorodifluorobromomethane	126	1974	3-Chloroperoxybenzoic acid	146	2755
-Chloro-1,1-difluoroethane	115	2517	Chlorophenates, liquid	154	2904
Chlorodifluoroethanes	115	2517	Chlorophenates, solid	154	2905
Chlorodifluoromethane	126	1018	Chlorophenolates, liquid	154	2904
Chlorodifluoromethane and Chloropentafluoroethane mixture	126	1973	Chlorophenolates, solid	154	2905
Chlorodinitrobenzenes	153	1577	Chlorophenols, liquid	153	2021
-Chloro-2,3-epoxypropane	131P	2023	Chlorophenols, solid	153	2020
2-Chloroethanal	153	2232	Chlorophenyltrichlorosilane	156	1753
Chloroform	151	1888	Chloropicrin	154	1580
Chloroformates, n.o.s.	155	2742	Chloropicrin, absorbed	154	1583
Chloroformates, poisonous, corrosive, flammable, n.o.s.	155	2742	Chloropicrin and Methyl bromide mixture	123	1581
Chloroformates, poisonous, corrosive, n.o.s.	154	3277	Chloropicrin and Methyl chloride mixture	119	1582

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Chloropicrin and non-flammable, non-liquefied compressed gas mixture	123 1955	Chlorotetrafluoroethane and Ethylene oxide mixture, with not more than 8.8% Ethylene oxide	126 329
Chloropicrin mixture, flammable	131 2929	Chlorotoluenes	130 222
Chloropicrin mixture, n.o.s.	154 1583	4-Chloro-o-toluidine hydrochloride	153 157
Chloropivaloyl chloride	156 9263	Chlorotoluidines	153 223
Chloroplatinic acid, solid	154 2507	Chlorotoluidines, liquid	153 223
Chloroprene, inhibited	131P 1991	Chlorotoluidines, solid	153 223
1-Chloropropane	129 1278	1-Chloro-2,2,2-trifluoroethane	126 1983
2-Chloropropane	129 2356	Chlorotrifluoroethane	126 1983
3-Chloropropanol-1	153 2849	Chlorotrifluoromethane	126 1022
2-Chloropropene	130P 2456	Chlorotrifluoromethane and Trifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	126 2599
2-Chloropropionic acid	153 2511	Chlorpyrifos	152 2783
alpha-Chloropropionic acid	153 2511	Chromic acetate	171 9101
2-Chloropyridine	153 2822	Chromic acid, solid	141 1463
Chlorosilanes, corrosive, flammable, n.o.s.	155 2986	Chromic acid, solution	154 1755
Chlorosilanes, corrosive, n.o.s.	156 2987	Chromic acid mixture, dry	141 1463
Chlorosilanes, flammable, corrosive, n.o.s.	155 2985	Chromic fluoride, solid	154 1756
Chlorosilanes, n.o.s.	155 2985	Chromic fluoride, solution	154 1757
Chlorosilanes, n.o.s.	155 2986	Chromic sulfate	171 9100
Chlorosilanes, n.o.s.	156 2987	Chromic sulphate	171 9100
Chlorosilanes, n.o.s.	139 2988	Chromium nitrate	141 2720
Chlorosilanes, water-reactive, flammable, corrosive, n.o.s.	139 2988	Chromium oxychloride	137 1758
Chlorosulfonic acid	137 1754	Chromium trioxide, anhydrous	141 1463
Chlorosulfonic acid and Sulfur trioxide mixture	137 1754	Chromosulfuric acid	154 2240
Chlorosulphonic acid	137 1754	Chromosulphuric acid	154 2240
Chlorosulphonic acid and Sulphur trioxide mixture	137 1754	Chromous chloride	171 9102
1-Chloro-1,2,2,2-tetrafluoroethane	126 1021	Cigarette lighter, with flammable gas	115 1057
Chlorotetrafluoroethane	126 1021		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Cigarette lighter, with flammable liquid	127	1226	Compound, tree or weed killing, solid (oxidizer)	140	1479
Cigarettes, self-lighting	133	1867	Compound, vulcanizing, liquid (corrosive)	154	1760
Clinical waste, unspecified, n.o.s.	158	3291	Compound, vulcanizing, liquid (flammable)	127	1142
Coal gas	119	1023	Compounds, cleaning, liquid (corrosive)	154	1760
Coal gas, compressed	119	1023	Compounds, cleaning, liquid (flammable)	128	1993
Coal tar distillate	128	1137	Compounds, polishing, liquid, etc. (flammable)	127	1142
Coal tar distillates, flammable	128	1136	Compressed gas, flammable, n.o.s.	115	1954
Coal tar dye, liquid	154	2801	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	119	1953
Coating solution	127	1139	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	119	1953
Cobalt naphthenates, powder	133	2001	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	119	1953
Cobaltous bromide	171	9103	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	119	1953
Cobaltous formate	171	9104	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	119	1953
Cobaltous sulfamate	171	9105	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119	1953
Cobaltous sulphamate	171	9105	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119	1953
Cobalt resinate, precipitated	133	1318	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119	1953
Cocculus	151	1584	Compressed gas, n.o.s.	126	1956
Collodion	127	2059			
Combustible liquid, n.o.s.	128	1993			
Compound, cleaning liquid (containing Hydrochloric (muriatic) acid)	157	1789			
Compound, cleaning liquid (containing Hydrofluoric acid)	157	1790			
Compound, rust preventing (corrosive)	154	1760			
Compound, rust removing (corrosive)	154	1760			
Compound, tree or weed killing, liquid (corrosive)	154	1760			
Compound, tree or weed killing, liquid (flammable)	128	1993			
Compound, tree or weed killing, liquid (toxic)	153	2810			

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Compressed gas, oxidizing, n.o.s.	122	3156	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, poisonous, corrosive, n.o.s.	123	3304	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3304	Compressed gas, poisonous, n.o.s.	123	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3304	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	123	1953
Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3304	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123	1953
Compressed gas, poisonous, flammable, corrosive, n.o.s.	119	3305	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123	1953
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3306
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3306
Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3305	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3306
Compressed gas, poisonous, flammable, n.o.s.	119	1953	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3306
Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953	Compressed gas, poisonous, oxidizing, n.o.s.	124	3303
Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3303

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	1953
Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3303	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	1953
Compressed gas, toxic, corrosive, n.o.s.	123	3304	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	1953
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1955
Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3304	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	1955
Compressed gas, toxic, flammable, corrosive, n.o.s.	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s.	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3306
Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3305	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3306
Compressed gas, toxic, flammable, n.o.s.	119	1953	Compressed gas, toxic, oxidizing, n.o.s.	124	3303

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124 3303	Corrosive liquid, acidic, organic, n.o.s.	153 3260
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124 3303	Corrosive liquid, basic, inorganic, n.o.s.	154 3260
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124 3303	Corrosive liquid, basic, organic, n.o.s.	153 3260
Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124 3303	Corrosive liquid, flammable, n.o.s.	132 2920
Consumer commodity	171 8000	Corrosive liquid, n.o.s.	154 1760
Copper acetoarsenite	151 1585	Corrosive liquid, oxidizing, n.o.s.	140 3093
Copper arsenite	151 1586	Corrosive liquid, poisonous, n.o.s.	154 2922
Copper based pesticide, liquid, flammable, poisonous	131 2776	Corrosive liquid, self-heating, n.o.s.	136 3301
Copper based pesticide, liquid, flammable, toxic	131 2776	Corrosive liquid, toxic, n.o.s.	154 2922
Copper based pesticide, liquid, poisonous	151 3010	Corrosive liquid, water-reactive, n.o.s.	138 3094
Copper based pesticide, liquid, poisonous, flammable	131 3009	Corrosive liquid, which in contact with water emits flammable gases, n.o.s.	138 3094
Copper based pesticide, liquid, toxic	151 3010	Corrosive solid, acidic, inorganic, n.o.s.	154 3260
Copper based pesticide, liquid, toxic, flammable	131 3009	Corrosive solid, acidic, organic, n.o.s.	154 3261
Copper based pesticide, solid, poisonous	151 2775	Corrosive solid, basic, inorganic, n.o.s.	154 3262
Copper based pesticide, solid, toxic	151 2775	Corrosive solid, basic, organic, n.o.s.	154 3263
Copper chlorate	141 2721	Corrosive solid, flammable, n.o.s.	134 2921
Copper chloride	154 2802	Corrosive solid, n.o.s.	154 1759
Copper cyanide	151 1587	Corrosive solid, oxidizing, n.o.s.	140 3084
Copra	135 1363	Corrosive solid, poisonous, n.o.s.	154 2923
Corrosive liquid, acidic, inorganic, n.o.s.	154 3264	Corrosive solid, self-heating, n.o.s.	136 3095

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Corrosive solid, toxic, n.o.s.	154 2923	Crotonic acid, liquid	153 2823
Corrosive solid, water-reactive, n.o.s.	138 3096	Crotonic acid, solid	153 2823
Corrosive solid, which in contact with water emits flammable gases, n.o.s.	138 3096	Crotonylene	128 1144
Cosmetics, liquid, n.o.s.	154 1760	Cumene	131 1918
Cosmetics, n.o.s.	133 1325	Cumene hydroperoxide	147 2116
Cosmetics, n.o.s.	140 1479	Cupric acetate	171 9106
Cosmetics, n.o.s.	128 1993	Cupric sulfate	171 9109
Cosmetics, solid, n.o.s.	154 1759	Cupric sulfate, ammoniated	171 9110
Cotton	133 1365	Cupric sulphate	171 9109
Cotton, wet	133 1365	Cupric sulphate, ammoniated	171 9110
Cotton waste, oily	133 1364	Cupric tartrate	171 9111
Coumaphos	152 2783	Cupriethylenediamine, solution	154 1761
Coumarin derivative pesticide, liquid, flammable, poisonous	131 3024	Cyanide solution, n.o.s.	157 1935
Coumarin derivative pesticide, liquid, flammable, toxic	131 3024	Cyanides, inorganic, n.o.s.	157 1588
Coumarin derivative pesticide, liquid, poisonous	151 3026	Cyanides, inorganic, solid, n.o.s.	157 1588
Coumarin derivative pesticide, liquid, poisonous, flammable	131 3025	Cyanogen	119 1026
Coumarin derivative pesticide, liquid, toxic	151 3026	Cyanogen, liquefied	119 1026
Coumarin derivative pesticide, liquid, toxic, flammable	131 3025	Cyanogen bromide	157 1889
Coumarin derivative pesticide, solid, poisonous	151 3027	Cyanogen chloride, inhibited	125 1589
Coumarin derivative pesticide, solid, toxic	151 3027	Cyanogen gas	119 1026
Cresols	153 2076	Cyanuric chloride	157 2670
Cresylic acid	153 2022	Cyclobutane	115 2601
Crotonaldehyde, inhibited	131P 1143	Cyclobutyl chloroformate	155 2744
Crotonaldehyde, stabilized	131P 1143	1,5,9-Cyclododecatriene	153 2518
Crotonic acid	153 2823	Cycloheptane	128 2241
		Cycloheptatriene	131 2603
		Cycloheptene	128 2242
		Cyclohexane	128 1145
		Cyclohexanethiol	131 3054
		Cyclohexanone	127 1915
		Cyclohexanone peroxide, not more than 72% as a paste	147 2896

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Cyclohexanone peroxide, not more than 72% in solution	147 2118	Devices, small, hydrocarbon gas powered, with release device	115 3150
Cyclohexanone peroxide, not more than 90%, with not less than 10% water	147 2119	Diacetone alcohol	129 1148
Cyclohexene	130 2256	Diacetone alcohol peroxides	148 2163
Cyclohexenyltrichlorosilane	156 1762	Diacetyl	127 2346
Cyclohexyl acetate	130 2243	Diallylamine	132 2359
Cyclohexylamine	132 2357	Diallyl ether	131P 2360
Cyclohexyl isocyanate	155 2488	4,4'-Diaminodiphenylmethane	153 2651
Cyclohexyl mercaptan	131 3054	Di-n-amylamine	132 2841
Cyclohexyltrichlorosilane	156 1763	Diazinon	152 2783
Cyclooctadiene phosphines	135 2940	2-Diazo-1-naphthol-4-sulfochloride	149 3042
Cyclooctadienes	130P 2520	2-Diazo-1-naphthol-4-sulphochloride	149 3042
Cyclooctatetraene	128P 2358	2-Diazo-1-naphthol-5-sulfochloride	149 3043
Cyclopentane	128 1146	2-Diazo-1-naphthol-5-sulphochloride	149 3043
Cyclopentanol	129 2244	Dibenzylchlorosilane	156 2434
Cyclopentanone	127 2245	Dibenzyl peroxydicarbonate	148 2149
Cyclopentene	128 2246	Diborane	119 1911
Cyclopropane	115 1027	Diborane, compressed	119 1911
Cyclopropane, liquefied	115 1027	Diborane mixtures	119 1911
Cymenes	130 2046	Dibromobenzene	129 2711
Dangerous goods in apparatus	171 8001	1,2-Dibromobutan-3-one	154 2648
Dangerous goods in machinery	171 8001	Dibromochloropropanes	159 2872
DDT	151 2761	Dibromodifluoromethane	159 1941
Decaborane	134 1868	Dibromomethane	160 2664
Decahydronaphthalene	130 1147	Di-n-butylamine	132 2248
n-Decane	128 2247	Dibutylaminoethanol	153 2873
Decanoyl peroxide	148 2120	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	148 2154
Denatured alcohol	127 1987	Di-(4-tert-butylcyclohexyl)-peroxydicarbonate	148 2894
Denatured alcohol (toxic)	131 1986	Dibutyl ethers	127 1149
Deuterium	115 1957		
Deuterium, compressed	115 1957		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
i-tert-butyl peroxide	145	2102	1,3-Dichloroacetone	153	2649
,2-Di-(tert-butylperoxy)butane	146	2111	Dichloroacetyl chloride	156	1765
,1-Di-(tert-butylperoxy)- cyclohexane	146	2179	Dichloroanilines	153	1590
,1-Di-(tert-butylperoxy)- cyclohexane	146	2180	Dichloroanilines, liquid	153	1590
,1-Di-(tert-butylperoxy)- cyclohexane	145	2885	Dichloroanilines, solid	153	1590
,1-Di-(tert-butylperoxy)- cyclohexane	145	2897	m-Dichlorobenzene	152	—
i-(sec-butyl)peroxydicarbonate	148	2150	o-Dichlorobenzene	152	1591
i-(sec-butyl)peroxydicarbonate	148	2151	p-Dichlorobenzene	152	1592
,3-Di-(2-tert-butylperoxy- isopropyl)benzene and	145	2112	2,4-Dichlorobenzoyl peroxide	146	2137
1,4-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures			2,4-Dichlorobenzoyl peroxide	145	2138
,4-Di-(2-tert-butylperoxy- isopropyl)benzene and	145	2112	2,4-Dichlorobenzoyl peroxide	145	2139
1,3-Di-(2-tert-butylperoxy- isopropyl)benzene mixtures			Dichlorobutene	132	2920
i-(tert-butylperoxy)phthalate	146	2106	Dichlorobutene	132	2924
i-(tert-butylperoxy)phthalate	145	2107	2,2'-Dichlorodiethyl ether	152	1916
i-(tert-butylperoxy)phthalate	145	2108	Dichlorodifluoroethylene	160	9018
,2-Di-(tert-butylperoxy)- propane	145	2883	Dichlorodifluoromethane	126	1028
,2-Di-(tert-butylperoxy)- propane	145	2884	Dichlorodifluoromethane and Difluoroethane azeotropic mixture with approximately 74% Dichlorodifluoromethane	126	2602
,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	146	2145	Dichlorodifluoromethane and Ethylene oxide mixture, with not more than 12.5% Ethylene oxide	126	3070
,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	145	2146	Dichlorodifluoromethane and Ethylene oxide mixtures, with not more than 12% Ethylene oxide	126	3070
,1-Di-(tert-butylperoxy)-3,3,5- trimethyl cyclohexane	145	2147	Dichlorodimethyl ether, symmetrical	153	2249
icetyl peroxydicarbonate	148	2164	Dichlorodiphenyltrichloroethane (DDT)	151	2761
icetyl peroxydicarbonate, not more than 42%, in water	148	2895	1,1-Dichloroethane	130	2362
ichloroacetic acid	153	1764	1,2-Dichloroethylene	132P	1150
			Dichloroethylene	132P	1150
			Dichloroethyl ether	152	1916

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1,1-Dichloro-1-fluoroethane	160	9274
Dichlorofluoromethane	126	1029
Dichloroisocyanuric acid, dry	141	2465
Dichloroisocyanuric acid salts	141	2465
Dichloroisopropyl ether	153	2490
Dichloromethane	160	1593
1,1-Dichloro-1-nitroethane	153	2650
Dichloropentanes	130	1152
2,4-Dichlorophenoxyacetic acid	152	2765
Dichlorophenyl isocyanates	156	2250
Dichlorophenyltrichlorosilane	156	1766
1,2-Dichloropropane	130	1279
Dichloropropane	130	1279
1,3-Dichloropropanol-2	153	2750
Dichloropropenes	132	2047
2,2-Dichloropropionic acid	154	1760
Dichlorosilane	119	2189
1,2-Dichloro-1,1,2,2-tetrafluoroethane	126	1958
Dichlorotetrafluoroethane	126	1958
3,5-Dichloro-2,4,6-trifluoropyridine	151	9264
Dichlorvos	152	2783
Dicumyl peroxide	145	2121
Dicycloheptadiene	127P	2251
Dicyclohexylamine	153	2565
Dicyclohexylammonium nitrite	153	2687
Dicyclohexyl peroxydicarbonate	148	2152
Dicyclohexyl peroxydicarbonate	148	2153
Dicyclopentadiene	129	2048
2,2-Di-(4,4-di-tert-butyl-peroxycyclohexyl)propane	145	2168
1,2-Di-(dimethylamino)ethane	129	2372
Didymium nitrate	140	1465

Name of Material	Guide ID	No. No.
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Dieldrin	151	276
Diesel fuel	128	120
Diesel fuel	128	199
Diethoxymethane	127	237
2,5-Diethoxy-4-morpholino-benzenediazonium zinc chloride	150	303
3,3-Diethoxypropene	127	237
Diethylamine	132	115
2-Diethylaminoethanol	132	268
Diethylaminoethanol	132	268
3-Diethylaminopropylamine	132	268
Diethylaminopropylamine	132	268
N,N-Diethylaniline	153	243
Diethylbenzene	130	204
Diethyl carbonate	127	236
Diethyldichlorosilane	155	176
Diethylenetriamine	154	207
Diethyl ether	127	115
N,N-Diethylethylenediamine	132	268
Di-(2-ethylhexyl)-peroxydicarbonate	148	212
Di-(2-ethylhexyl)-peroxydicarbonate	148	212
Di-(2-ethylhexyl)phosphoric acid	153	190
Diethyl ketone	127	115
p-Diethylnitrosoaniline	136	—
Diethyl peroxydicarbonate	148	217
Diethyl sulfate	152	159
Diethyl sulfide	129	237
Diethyl sulphate	152	159
Diethyl sulphide	129	237
Diethylthiophosphoryl chloride	155	275

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Diethylzinc	135	1366	2-Dimethylaminoacetonitrile	131	2378
Difluorochloroethanes	115	2517	4-Dimethylamino-6-(2-dimethyl- aminoethoxy)toluene-2- diazonium zinc chloride	150	3039
1,1-Difluoroethane	115	1030	2-Dimethylaminoethanol	132	2051
Difluoroethane	115	1030	2-Dimethylaminoethyl acrylate	152	3302
Difluoroethane and Dichlorodifluoromethane azeotropic mixture with approximately 74% dichlorodifluoromethane	126	2602	Dimethylaminoethyl methacrylate	153P	2522
1,1-Difluoroethylene	116P	1959	N,N-Dimethylaniline	153	2253
Difluoromethane	115	3252	Di-(2-methylbenzoyl)peroxide	148	2593
Difluorophosphoric acid, anhydrous	154	1768	2,3-Dimethylbutane	128	2457
2,2-Dihydroperoxypropane	146	2178	1,3-Dimethylbutylamine	132	2379
2,3-Dihydropyran	127	2376	Dimethylcarbamoyl chloride	156	2262
Di-(1-hydroxycyclohexyl)- peroxide	145	2148	Dimethyl carbonate	129	1161
Diisobutylamine	132	2361	Dimethyl chlorothiophosphate	156	2267
Diisobutylene, isomeric compounds	127	2050	Dimethylcyclohexanes	128	2263
Diisobutyl ketone	127	1157	Dimethylcyclohexylamine	132	2264
Diisobutyryl peroxide	148	2182	2,5-Dimethyl-2,5-di- (benzoylperoxy)hexane	146	2172
Diisooctyl acid phosphate	153	1902	2,5-Dimethyl-2,5-di- (benzoylperoxy)hexane	145	2173
Diisopropylamine	132	1158	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexane	145	2155
Diisopropylbenzene hydroperoxide	145	2171	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexane	145	2156
Diisopropyl ether	127	1159	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexyne-3	146	2158
Diisotridecyl peroxydicarbonate	148	2889	2,5-Dimethyl-2,5-di-(tert- butylperoxy)hexyne-3, with not more than 52% Peroxide in inert solid	145	2159
Diketene, inhibited	131P	2521	Dimethyldichlorosilane	155	1162
1,1-Dimethoxyethane	127	2377	Dimethyldiethoxysilane	127	2380
1,2-Dimethoxyethane	127	2252	2,5-Dimethyl-2,5-di-(2-ethyl- hexanoylperoxy)hexane	148	2157
Dimethylamine, anhydrous	118	1032			
Dimethylamine, aqueous solution	129	1160			
Dimethylamine, solution	129	1160			

Name of Material	Guide ID No. No.	
2,5-Dimethyl-2,5-dihydroperoxy hexane, not more than 82% with water	146	2174
Dimethyldioxanes	128	2707
Dimethyl disulfide	130	2381
Dimethyl disulphide	130	2381
Dimethylethanolamine	132	2051
Dimethyl ether	115	1033
N,N-Dimethylformamide	129	2265
Dimethylhexane dihydroperoxide, with 18% or more water	146	2174
1,1-Dimethylhydrazine	131	1163
1,2-Dimethylhydrazine	131	2382
Dimethylhydrazine, symmetrical	131	2382
Dimethylhydrazine, unsymmetrical	131	1163
Dimethyl phosphorochloridothioate	156	2267
2,2-Dimethylpropane	115	2044
Dimethyl-N-propylamine	132	2266
Dimethyl sulfate	156	1595
Dimethyl sulfide	130	1164
Dimethyl sulphate	156	1595
Dimethyl sulphide	130	1164
Dimethylthiophosphoryl chloride	156	2267
Dimethylzinc	135	1370
Dimyristyl peroxydicarbonate	148	2595
Dimyristyl peroxydicarbonate, not more than 42%, in water	148	2892
Dinitroanilines	153	1596
Dinitrobenzenes	152	1597
Dinitrochlorobenzene	153	1577
Dinitro-o-cresol	153	1598
Dinitrocyclohexylphenol	153	9026

Name of Material	Guide ID No. No.	
Dinitrogen tetroxide	124	106
Dinitrogen tetroxide, liquefied	124	106
Dinitrogen tetroxide and Nitric oxide mixture	124	197
Dinitrophenol, solution	153	159
Dinitrophenol, wetted with not less than 15% water	113	132
Dinitrophenolates, wetted with not less than 15% water	113	132
Dinitroresorcinol, wetted with not less than 15% water	113	132
N,N'-Dinitroso-N,N'-dimethyl terephthalamide	149	297
N,N'-Dinitrosopentamethylene tetramine	149	297
Dinitrotoluenes	152	203
Dinitrotoluenes, liquid	152	203
Dinitrotoluenes, molten	152	160
Dinitrotoluenes, solid	152	203
Dioxane	127	116
Dioxolane	127	116
Dipentene	128	205
Diphenylamine chloroarsine	154	169
Diphenylchloroarsine	151	169
Diphenylchloroarsine, liquid	151	169
Diphenylchloroarsine, solid	151	169
Diphenyldichlorosilane	156	176
Diphenylmethane-4,4'- diisocyanate	156	248
Diphenylmethyl bromide	153	177
Diphenyloxide-4,4'- disulfohydrazide	149	295
Diphenyloxide-4,4'- disulphohydrazide	149	295
Diphosgene	125	107

Name of Material	Guide ID	No. No.	Name of Material	Guide ID	No. No.
Dipicryl sulfide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, liquid, flammable, toxic	131	2772
Dipicryl sulphide, wetted with not less than 10% water	113	2852	Dithiocarbamate pesticide, liquid, poisonous	151	3006
Dipropylamine	132	2383	Dithiocarbamate pesticide, liquid, poisonous, flammable	131	3005
4-Dipropylaminobenzene-diazonium zinc chloride	149	3034	Dithiocarbamate pesticide, liquid, toxic	151	3006
Di-n-propyl ether	127	2384	Dithiocarbamate pesticide, liquid, toxic, flammable	131	3005
Dipropyl ether	127	2384	Dithiocarbamate pesticide, solid, poisonous	151	2771
Dipropyl ketone	127	2710	Dithiocarbamate pesticide, solid, toxic	151	2771
Di-n-propyl peroxydicarbonate	148	2176	Di-(3,5,5-trimethyl-1,2-dioxolanyl-3)peroxide	148	2597
Disinfectant, liquid, corrosive, n.o.s.	153	1903	Divinyl ether, inhibited	131P	1167
Disinfectant, liquid, n.o.s.	128	1993	Dodecylbenzenesulfonic acid	153	2584
Disinfectant, liquid, poisonous, n.o.s.	151	3142	Dodecylbenzenesulphonic acid	153	2584
Disinfectant, liquid, toxic, n.o.s.	151	3142	Dodecyltrichlorosilane	156	1771
Disinfectant, solid, poisonous, n.o.s.	151	1601	Driers, paint or varnish, liquid, n.o.s.	127	1168
Disinfectant, solid, toxic, n.o.s.	151	1601	Drugs, liquid, n.o.s.	154	1760
Disinfectants, corrosive, liquid, n.o.s.	153	1903	Drugs, liquid, n.o.s.	153	2810
Disinfectants, liquid, n.o.s. (poisonous)	151	3142	Drugs, n.o.s.	133	1325
Disinfectants, solid, n.o.s. (poisonous)	151	1601	Drugs, n.o.s.	140	1479
Disodium trioxosilicate	154	3253	Drugs, n.o.s.	128	1993
Disodium trioxosilicate, pentahydrate	154	3253	Drugs, solid, n.o.s.	154	1759
Dispersant gas, n.o.s.	126	1078	Drugs, solid, n.o.s.	154	2811
Dispersant gas, n.o.s. (flammable)	115	1954	Dry ice	120	1845
Distearyl peroxydicarbonate	145	2592	Dye, liquid, corrosive, n.o.s.	154	2801
Disulfoton	152	2783	Dye, liquid, poisonous, n.o.s.	151	1602
Dithiocarbamate pesticide, liquid, flammable, poisonous	131	2772	Dye, liquid, toxic, n.o.s.	151	1602
			Dye, solid, corrosive, n.o.s.	154	3147
			Dye, solid, poisonous, n.o.s.	151	3143

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Dye, solid, toxic, n.o.s.	151 3143	Environmentally hazardous substances, liquid, n.o.s.	171 3082
Dye intermediate, liquid, corrosive, n.o.s.	154 2801	Environmentally hazardous substances, solid, n.o.s.	171 3077
Dye intermediate, liquid, poisonous, n.o.s.	151 1602	Epibromohydrin	131 2558
Dye intermediate, liquid, toxic, n.o.s.	151 1602	Epichlorohydrin	131P 2023
Dye intermediate, solid, corrosive, n.o.s.	154 3147	1,2-Epoxy-3-ethoxypropane	127 2752
Dye intermediate, solid, poisonous, n.o.s.	151 3143	Esters, n.o.s.	127 3272
Dye intermediate, solid, toxic, n.o.s.	151 3143	Etching acid, liquid, n.o.s.	157 1790
EDTA	171 9117	Ethane	115 1035
Elevated temperature liquid, flammable, n.o.s., with flash point above 37.8° C (100° F), at or above its flash point	128 3256	Ethane, compressed	115 1035
Elevated temperature liquid, flammable, n.o.s., with flash point above 60.5° C (141° F), at or above its flash point	128 3256	Ethane, refrigerated liquid	115 1961
Elevated temperature liquid, n.o.s., at or above 100° C (212° F) and below its flash point	128 3257	Ethane-Propane mixture, refrigerated liquid	115 1961
Elevated temperature material, liquid, n.o.s., (at or above 100° C (212° F) and below its flash point)	128 9259	Ethanol	127 1170
Elevated temperature solid, n.o.s., at or above 240° C (464° F)	171 3258	Ethanol, solution	127 1170
Endosulfan	151 2761	Ethanolamine	153 2491
Engine starting fluid	115 1960	Ethanolamine, solution	153 2491
Engines, internal combustion, including when fitted in machinery or vehicles	128 3166	Ethers, n.o.s.	127 3271
		Ethion	152 2783
		Ethyl acetate	129 1173
		Ethyl acetylene, inhibited	116P 2452
		Ethyl acrylate, inhibited	129P 1917
		Ethyl alcohol	127 1170
		Ethyl alcohol, solution	127 1170
		Ethylamine	118 1036
		Ethylamine, aqueous solution, with not less than 50% but not more than 70% Ethylamine	132 2270
		Ethyl amyl ketone	127 2271
		2-Ethylaniline	153 2273
		N-Ethylaniline	153 2272
		Ethylbenzene	129 1175
		N-Ethyl-N-benzylaniline	153 2274

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
N-Ethylbenzyltoluidines	153	2753	Ethylene, refrigerated liquid (cryogenic liquid)	115	1038
Ethyl borate	129	1176	Ethylene chlorohydrin	131	1135
Ethyl bromide	131	1391	Ethylenediamine	132	1604
Ethyl bromoacetate	155	1603	Ethylenediaminetetraacetic acid	171	9117
2-Ethylbutanol	129	2275	Ethylene dibromide	154	1605
2-Ethylbutyl acetate	129	1177	Ethylene dibromide and Methyl bromide mixture, liquid	151	1647
Ethylbutyl acetate	129	1177	Ethylene dichloride	129	1184
Ethyl butyl ether	127	1179	Ethylene glycol diethyl ether	127	1153
2-Ethylbutyraldehyde	129	1178	Ethylene glycol monobutyl ether	152	2369
Ethyl butyrate	129	1180	Ethylene glycol monoethyl ether	127	1171
Ethyl chloride	115	1037	Ethylene glycol monoethyl ether acetate	129	1172
Ethyl chloroacetate	155	1181	Ethylene glycol monomethyl ether	127	1188
Ethyl chloroformate	155	1182	Ethylene glycol monomethyl ether acetate	129	1189
Ethyl 2-chloropropionate	132	2935	Ethyleneimine, inhibited	131P	1185
Ethyl chlorothioformate	155	2826	Ethylene oxide	119	1040
Ethyl crotonate	129	1862	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide	115	1041
Ethyl cyanoacetate	156	2666	Ethylene oxide and Carbon dioxide mixture, with more than 87% Ethylene oxide	119	3300
Ethyl-3,3-di-(tert-butyl- peroxy)butyrate	146	2184	Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide	115	1041
Ethyl-3,3-di-(tert- butylperoxy)butyrate	145	2598	Ethylene oxide and Carbon dioxide mixtures, with not more than 6% Ethylene oxide	126	1952
Ethyl-3,3-di-(tert-butyl- peroxy)butyrate, not more than 77% in solution	145	2185	Ethylene oxide and Carbon dioxide mixtures, with not more than 9% Ethylene oxide	126	1952
Ethyldichloroarsine	151	1892			
Ethyldichlorosilane	139	1183			
Ethylene	116P	1962			
Ethylene, Acetylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene.	116	3138			
Ethylene, compressed	116P	1962			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Ethylene oxide and Chlorotetrafluoroethane mixture, with not more than 8.8% Ethylene oxide	126 3297	Ethyl methyl ketone	127 119
Ethylene oxide and Dichlorodifluoromethane mixture, with not more than 12.5% Ethylene oxide	126 3070	Ethyl nitrate	128 199
Ethylene oxide and Dichlorodifluoromethane mixtures, with not more than 12% Ethylene oxide	126 3070	Ethyl nitrite, solution	131 119
Ethylene oxide and Pentafluoroethane mixture, with not more than 7.9% Ethylene oxide	126 3298	Ethyl orthoformate	129 25
Ethylene oxide and Propylene oxide mixture, with not more than 30% Ethylene oxide	129P 2983	Ethyl oxalate	156 252
Ethylene oxide and Tetrafluoroethane mixture, with not more than 5.6% Ethylene oxide	126 3299	Ethylphenyldichlorosilane	156 243
Ethylene oxide with Nitrogen	119 1040	Ethyl phosphonothioic dichloride, anhydrous	154 292
Ethyl ether	127 1155	Ethyl phosphonous dichloride, anhydrous	135 284
Ethyl fluoride	115 2453	Ethyl phosphorodichloridate	154 292
Ethyl formate	129 1190	1-Ethylpiperidine	132 238
Ethylhexaldehydes	129 1191	Ethyl propionate	129 119
2-Ethylhexylamine	132 2276	2-Ethyl-3-propylacrolein	153 —
2-Ethylhexyl chloroformate	156 2748	Ethyl propyl ether	127 261
Ethyl isobutyrate	129 2385	Ethyl silicate	132 129
Ethyl isocyanate	155 2481	Ethylsulfuric acid	156 257
Ethyl lactate	129 1192	Ethylsulphuric acid	156 257
Ethyl mercaptan	130 2363	N-Ethyltoluidines	153 275
Ethyl methacrylate	129P 2277	Ethyltrichlorosilane	155 119
Ethyl methacrylate, inhibited	129P 2277	Etiologic agent, n.o.s.	158 281
Ethyl methyl ether	115 1039	Explosive A	112 —
		Explosive B	112 —
		Explosive C	114 —
		Explosives, division 1:1, 1.2, 1.3, 1.5 or 1.6	112 —
		Explosives, division 1.4	114 —
		Extracts, aromatic, liquid	127 116
		Extracts, flavoring, liquid	127 119
		Extracts, flavouring, liquid	127 119
		Fabrics, animal, synthetic or vegetable, n.o.s., with oil	133 137
		Fabrics impregnated with weakly nitrated Nitrocellulose, n.o.s.	133 135

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Ferric ammonium citrate	171	9118	Fibres, vegetable, dry	133	—
Ferric ammonium oxalate	171	9119	Fibres impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353
Ferric arsenate	151	1606	Film	133	1324
Ferric arsenite	151	1607	Films, nitrocellulose base	133	1324
Ferric chloride	157	1773	Fire extinguisher charges, corrosive liquid	154	1774
Ferric chloride, anhydrous	157	1773	Fire extinguishers with compressed gas	126	1044
Ferric chloride, solution	154	2582	Fire extinguishers with liquefied gas	126	1044
Ferric fluoride	171	9120	Firelighters, solid, with flammable liquid	133	2623
Ferric nitrate	140	1466	First aid kit	171	3316
Ferric sulfate	171	9121	Fish meal, stabilized	171	2216
Ferric sulphate	171	9121	Fish meal, unstabilized	133	1374
Ferrocerium	170	1323	Fish meal containing 6% to 12% water	171	2216
Ferrosilicon	139	1408	Fish meal containing less than 6% or more than 12% water	133	1374
Ferrous ammonium sulfate	171	9122	Fish scrap, stabilized	171	2216
Ferrous ammonium sulphate	171	9122	Fish scrap, unstabilized	133	1374
Ferrous arsenate	151	1608	Fish scrap containing 6% to 12% water	171	2216
Ferrous chloride, solid	154	1759	Fish scrap containing less than 6% or more than 12% water	133	1374
Ferrous chloride, solution	154	1760	Flame retardant compound, liquid (corrosive)	154	1760
Ferrous metal borings, shavings, turnings or cuttings	170	2793	Flammable gas in lighter for cigars, cigarettes, etc.	115	1057
Ferrous sulfate	171	9125	Flammable liquid, corrosive, n.o.s.	132	2924
Ferrous sulphate	171	9125	Flammable liquid, n.o.s.	128	1993
Fertilizer, ammoniating solution, with free Ammonia	125	1043	Flammable liquid, poisonous, corrosive, n.o.s.	131	3286
Fiber, animal, synthetic or vegetable, n.o.s., with oil	133	1373	Flammable liquid, poisonous, n.o.s.	131	1992
Fiber, animal or vegetable, n.o.s., burnt, wet or damp	133	1372			
Fibers	133	1372			
Fibers impregnated with weakly nitrated Nitrocellulose, n.o.s.	133	1353			
Fibres, animal, synthetic or vegetable, n.o.s., with oil	133	1373			
Fibres, animal or vegetable, burnt, wet or damp	133	—			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Flammable liquid, toxic, corrosive, n.o.s.	131 3286	Fluorine, refrigerated liquid (cryogenic liquid)	167 9192
Flammable liquid, toxic, n.o.s.	131 1992	Fluoroacetic acid	156 2642
Flammable liquid preparations, n.o.s.	127 1142	Fluoroanilines	153 2941
Flammable liquids, elevated temperature material, n.o.s.	128 9276	Fluorobenzene	130 2387
Flammable solid, corrosive, inorganic, n.o.s.	134 3180	Fluoroboric acid	154 1775
Flammable solid, corrosive, n.o.s.	134 2925	Fluorophosphoric acid, anhydrous	154 1776
Flammable solid, corrosive, organic, n.o.s.	134 2925	Fluorosilicates, n.o.s.	151 2856
Flammable solid, inorganic, corrosive, n.o.s.	134 3180	Fluorosilicic acid	154 1778
Flammable solid, inorganic, n.o.s.	133 3178	Fluorosulfonic acid	137 1777
Flammable solid, n.o.s.	133 1325	Fluorosulphonic acid	137 1777
Flammable solid, organic, molten, n.o.s.	133 3176	Fluorotoluenes	130 2388
Flammable solid, organic, n.o.s.	133 1325	Fluosilicic acid	154 1778
Flammable solid, oxidizing, n.o.s.	140 3097	Formaldehyde, solution, flammable	132 1198
Flammable solid, poisonous, inorganic, n.o.s.	134 3179	Formaldehyde, solutions (Formalin)	132 1198
Flammable solid, poisonous, n.o.s.	134 2926	Formaldehyde, solutions (Formalin) (corrosive)	132 2209
Flammable solid, poisonous, organic, n.o.s.	134 2926	Formic acid	153 1779
Flammable solid, toxic, inorganic, n.o.s.	134 3179	Fuel, aviation, turbine engine	128 1863
Flammable solid, toxic, organic, n.o.s.	134 2926	Fuel oil	128 1202
Flue dust, poisonous	154 2811	Fuel oil	128 1993
Fluoboric acid	154 1775	Fuel oil, no. 1,2,4,5,6	128 1202
Fluorine	124 1045	Fumaric acid	171 9126
Fluorine, compressed	124 1045	Fumaryl chloride	156 1780
		Furan	127 2389
		Furfural	132P 1199
		Furfuraldehydes	132P 1199
		Furfuryl alcohol	153 2874
		Furfurylamine	132 2526
		Fusee (rail or highway)	133 1325
		Fusel oil	127 1201

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Gallium	172 2803	Hafnium powder, dry	135 2545
Gas, refrigerated liquid, flammable, n.o.s.	115 3312	Hafnium powder, wetted with not less than 25% water	170 1326
Gas, refrigerated liquid, n.o.s.	120 3158	Halogenated irritating liquid, n.o.s.	159 1610
Gas, refrigerated liquid, oxidizing, n.o.s.	122 3311	Hay, wet, damp or contaminated with oil	133 1327
Gas cartridges	115 2037	Hazardous substance, liquid, n.o.s.	171 9188
Gas drips, hydrocarbon	128 1864	Hazardous substance, solid, n.o.s.	171 9188
Gas generator assemblies	171 8013	Hazardous waste, liquid, n.o.s.	171 3082
Gas identification set	123 9035	Hazardous waste, liquid, n.o.s.	171 9189
Gasohol	128 1203	Hazardous waste, solid, n.o.s.	171 3077
Gas oil	128 1202	Hazardous waste, solid, n.o.s.	171 9189
Gasoline	128 1203	Heater for refrigerator car, liquid fuel type	128 1993
Gas sample, non-pressurized, flammable, n.o.s., not refrigerated liquid	115 3167	Heating oil, light	128 1202
Gas sample, non-pressurized, poisonous, flammable, n.o.s., not refrigerated liquid	119 3168	Heat producing article	171 8038
Gas sample, non-pressurized, poisonous, n.o.s., not refrigerated liquid	123 3169	Helium	121 1046
Gas sample, non-pressurized, toxic, flammable, n.o.s., not refrigerated liquid	119 3168	Helium, compressed	121 1046
Gas sample, non-pressurized, toxic, n.o.s., not refrigerated liquid	123 3169	Helium, refrigerated liquid (cryogenic liquid)	120 1963
Genetically modified micro- organisms	171 3245	Helium-Oxygen mixture	122 1980
Genetically modified organisms	171 9278	Heptafluoropropane	126 3296
Germane	119 2192	n-Heptaldehyde	129 3056
Glycerol alpha- monochlorohydrin	153 2689	Heptanes	128 1206
Glycidaldehyde	131P 2622	n-Heptene	128 2278
Grenade, tear gas	159 2017	Hexachloroacetone	153 2661
Guanidine nitrate	143 1467	Hexachlorobenzene	152 2729
		Hexachlorobutadiene	151 2279
		Hexachlorocyclopentadiene	151 2646
		Hexachloroethane	151 9037
		Hexachlorophene	151 2875
		Hexadecyltrichlorosilane	156 1781

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Hexadiene	130	2458	Hexyltrichlorosilane	156	1784
Hexaethyl tetraphosphate	151	1611	Hydrazine, anhydrous	132	2029
Hexaethyl tetraphosphate, liquid	151	1611	Hydrazine, aqueous solution, with not less than 37% but not more than 64% Hydrazine	153	2030
Hexaethyl tetraphosphate, solid	151	1611	Hydrazine, aqueous solution, with not more than 37% Hydrazine	152	3293
Hexaethyl tetraphosphate and compressed gas mixture	123	1612	Hydrazine, aqueous solutions, with more than 64% Hydrazine	132	2029
Hexaethyl tetraphosphate mixture, liquid	152	2783	Hydrazine, aqueous solutions, with not more than 64% Hydrazine	153	2030
Hexafluoroacetone	125	2420	Hydrazine hydrate	153	2030
Hexafluoroacetone hydrate	151	2552	Hydrides, metal, n.o.s.	138	1409
Hexafluoroethane	126	2193	Hydriodic acid	154	1787
Hexafluoroethane, compressed	126	2193	Hydriodic acid, solution	154	1787
Hexafluorophosphoric acid	154	1782	Hydrobromic acid	154	1788
Hexafluoropropylene	126	1858	Hydrobromic acid, solution	154	1788
Hexafluoropropylene oxide	126	1956	Hydrocarbon gas, compressed, n.o.s.	115	1964
Hexaldehyde	129	1207	Hydrocarbon gas, liquefied, n.o.s.	115	1965
Hexamethylenediamine, solid	153	2280	Hydrocarbon gas mixture, compressed, n.o.s.	115	1964
Hexamethylenediamine, solution	153	1783	Hydrocarbon gas mixture, liquefied, n.o.s.	115	1965
Hexamethylene diisocyanate	156	2281	Hydrocarbon gas refills for small devices, with release device	115	3150
Hexamethyleneimine	132	2493	Hydrocarbons, liquid, n.o.s.	128	3295
Hexamethylenetetramine	133	1328	Hydrochloric acid	157	1789
3,3,6,6,9,9-Hexamethyl-1,2,4,5- tetraoxacyclononane	146	2165	Hydrochloric acid, mixture	157	1789
3,3,6,6,9,9-Hexamethyl-1,2,4,5- tetraoxacyclononane	145	2166	Hydrochloric acid, solution	157	1789
3,3,6,6,9,9-Hexamethyl-1,2,4,5- tetraoxacyclononane	145	2167	Hydrocyanic acid, aqueous solution, with less than 5% Hydrogen cyanide	154	1613
Hexamine	133	1328			
Hexanes	128	1208			
Hexanoic acid	154	1760			
Hexanoic acid	153	2829			
Hexanols	129	2282			
1-Hexene	128	2370			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide	154 1613	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide	131 3294
Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	117 1051	Hydrogen cyanide, stabilized	117 1051
Hydrocyanic acid, liquefied	117 1051	Hydrogen cyanide, stabilized (absorbed)	131 1614
Hydrofluoric acid	157 1790	Hydrogendifluorides, n.o.s.	154 1740
Hydrofluoric acid, solution	157 1790	Hydrogen fluoride, anhydrous	125 1052
Hydrofluoric acid and Sulfuric acid mixture	157 1786	Hydrogen iodide, anhydrous	125 2197
Hydrofluoric acid and Sulphuric acid mixture	157 1786	Hydrogen peroxide, aqueous solution, stabilized, with more than 60% Hydrogen peroxide	143 2015
Hydrofluorosilicic acid	154 1778	Hydrogen peroxide, aqueous solution, with not less than 8% but less than 20% Hydrogen peroxide	140 2984
Hydrofluosilicic acid	154 1778	Hydrogen peroxide, aqueous solution, with not less than 20% but not more than 60% Hydrogen peroxide (stabilized as necessary)	140 2014
Hydrogen	115 1049	Hydrogen peroxide, stabilized	143 2015
Hydrogen, compressed	115 1049	Hydrogen peroxide and Peroxyacetic acid mixture, with acid(s), water and not more than 5% Peroxyacetic acid, stabilized	140 3149
Hydrogen, refrigerated liquid (cryogenic liquid)	115 1966	Hydrogen selenide, anhydrous	117 2202
Hydrogen and Carbon monoxide mixture	119 2600	Hydrogen sulfide	117 1053
Hydrogen and Carbon monoxide mixture, compressed	119 2600	Hydrogen sulfide, liquefied	117 1053
Hydrogen and Methane mixture, compressed	115 2034	Hydrogen sulphide	117 1053
Hydrogen bromide, anhydrous	125 1048	Hydrogen sulphide, liquefied	117 1053
Hydrogen chloride, anhydrous	125 1050	Hydroquinone	153 2662
Hydrogen chloride, refrigerated liquid	125 2186	3-(2-Hydroxyethoxy)-4-pyrrolidin-1-yl benzene-diazonium zinc chloride	150 3035
Hydrogen cyanide, anhydrous, stabilized	117 1051	Hydroxylamine sulfate	154 2865
Hydrogen cyanide, anhydrous, stabilized (absorbed)	131 1614	Hydroxylamine sulphate	154 2865
Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide	154 1613		

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Hypochlorite solution	154 1791	Isobutane mixture	115 107
Hypochlorite solution, with more than 5% available Chlorine	154 1791	Isobutane mixture	115 196
Hypochlorites, inorganic, n.o.s.	140 3212	Isobutanol	129 121
3,3'-Iminodipropylamine	153 2269	Isobutyl acetate	129 121
Infectious substance, affecting animals only	158 2900	Isobutyl acrylate	130P 252
Infectious substance, affecting humans	158 2814	Isobutyl acrylate, inhibited	130P 252
Ink, printer's, flammable	129 1210	Isobutyl alcohol	129 121
Insecticide, dry, n.o.s.	151 2588	Isobutyl aldehyde	129 204
Insecticide, liquefied gas	126 1968	Isobutylamine	132 121
Insecticide, liquefied gas, containing Poison A or Poison B material	123 1967	Isobutyl chloroformate	155 274
Insecticide, liquid, poisonous, n.o.s.	151 2902	Isobutylene	115 105
Insecticide gas, flammable, n.o.s.	115 1954	Isobutylene	115 107
Insecticide gas, n.o.s.	126 1968	Isobutyl formate	132 239
Insecticide gas, poisonous, n.o.s.	123 1967	Isobutyl isobutyrate	129 252
Insecticide gas, toxic, n.o.s.	123 1967	Isobutyl isocyanate	155 248
Iodine monochloride	157 1792	Isobutyl methacrylate	130P 228
Iodine pentafluoride	144 2495	Isobutyl methacrylate, inhibited	130P 228
2-Iodobutane	129 2390	Isobutyl propionate	129 239
Iodomethylpropanes	129 2391	Isobutyraldehyde	129 204
Iodopropanes	129 2392	Isobutyric acid	132 252
IPDI	156 2290	Isobutyric anhydride	132 253
Iron oxide, spent	135 1376	Isobutyronitrile	131 228
Iron pentacarbonyl	131 1994	Isobutyryl chloride	132 239
Iron sponge, spent	135 1376	Isocyanate solution, flammable, poisonous, n.o.s.	155 247
Irritating agent, n.o.s.	159 1693	Isocyanate solution, flammable, toxic, n.o.s.	155 247
Isobutane	115 1075	Isocyanate solution, poisonous, flammable, n.o.s.	155 308
Isobutane	115 1969	Isocyanate solution, poisonous, n.o.s.	155 220
		Isocyanate solution, toxic, flammable, n.o.s.	155 308
		Isocyanate solution, toxic, n.o.s.	155 220

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Isocyanate solutions, n.o.s.	155	2206	Isopropanolamine	171	9127
Isocyanate solutions, n.o.s.	155	2478	dodecylbenzenesulphonate		
Isocyanate solutions, n.o.s.	155	3080	Isopropenyl acetate	129P	2403
Isocyanate solutions, n.o.s. (toxic)	155	2207	Isopropenylbenzene	128	2303
Isocyanates, flammable, poisonous, n.o.s.	155	2478	Isopropyl acetate	129	1220
Isocyanates, flammable, toxic, n.o.s.	155	2478	Isopropyl acid phosphate	153	1793
Isocyanates, n.o.s.	155	2206	Isopropyl alcohol	129	1219
Isocyanates, n.o.s.	155	2478	Isopropylamine	132	1221
Isocyanates, n.o.s.	155	3080	Isopropylbenzene	131	1918
Isocyanates, n.o.s. (toxic)	155	2207	Isopropyl butyrate	129	2405
Isocyanates, poisonous, flammable, n.o.s.	155	3080	Isopropyl chloroacetate	155	2947
Isocyanates, poisonous, n.o.s.	155	2206	Isopropyl chloroformate	155	2407
Isocyanates, toxic, flammable, n.o.s.	155	3080	Isopropyl 2-chloropropionate	132	2934
Isocyanates, toxic, n.o.s.	155	2206	Isopropyl isobutyrate	131	2406
Isocyanatobenzotrifluorides	156	2285	Isopropyl isocyanate	155	2483
Isodecane	128	2287	Isopropyl mercaptan	130	2402
Isododecane	128	2288	Isopropyl nitrate	130	1222
Isododecyl peroxide	148	2128	Isopropyl percarbonate, unstabilized	148	2133
Isododecene	128	1216	Isopropyl peroxydicarbonate	148	2133
Isododecane	128	1265	Isopropyl peroxydicarbonate	148	2134
Isododecanoic acid	154	1760	Isopropyl propionate	129	2409
Isododecenes	128	2371	Isosorbide dinitrate mixture	133	2907
Isophoronediamine	153	2289	Isosorbide-5-mononitrate	133	3251
Isophorone diisocyanate	156	2290	Kerosene	128	1223
Isoprene, inhibited	130P	1218	Ketones, liquid, n.o.s.	127	1224
Isopropanol	129	1219	Krypton	121	1056
Isopropanolamine	171	9127	Krypton, compressed	121	1056
dodecylbenzenesulfonate			Krypton, refrigerated liquid (cryogenic liquid)	120	1970
			Lacquer chips, dry	133	2557
			Lauroyl peroxide	145	2124

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Lauroyl peroxide, not more than 42%, stable dispersion, in water	145 2893	Lindane	151 270
Leachable toxic waste	151 9500	Liquefied gas (nonflammable)	121 105
Lead acetate	151 1616	Liquefied gas, flammable, n.o.s.	115 195
Lead arsenates	151 1617	Liquefied gas, flammable, n.o.s.	115 316
Lead arsenites	151 1618	Liquefied gas, flammable, poisonous, n.o.s.	119 195
Lead chloride	151 2291	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	119 195
Lead compound, soluble, n.o.s.	151 2291	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	119 195
Lead cyanide	151 1620	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	119 195
Lead dioxide	141 1872	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	119 195
Lead fluoborate	151 2291	Liquefied gas, flammable, toxic, n.o.s.	119 195
Lead fluoride	154 2811	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	119 195
Lead nitrate	141 1469	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119 195
Lead perchlorate	141 1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119 195
Lead perchlorate, solid	141 1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119 195
Lead perchlorate, solution	141 1470	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	119 195
Lead peroxide	141 1872	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	119 195
Lead phosphite, dibasic	133 2989	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	119 195
Lead sulfate, with more than 3% free acid	154 1794	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	119 195
Lead sulphate, with more than 3% free acid	154 1794	Liquefied gas, n.o.s.	126 195
Life-saving appliances, not self-inflating	171 3072	Liquefied gas, n.o.s.	126 316
Life-saving appliances, self-inflating	171 2990	Liquefied gas, oxidizing, n.o.s.	122 316
Lighter refills (cigarettes) (flammable gas)	115 1057	Liquefied gas, poisonous, corrosive, n.o.s.	123 330
Lighters (cigarettes) (flammable gas)	115 1057		
Lighters for cigars, cigarettes etc. with lighter fluid	127 1226		
Lighters for cigars, cigarettes (flammable liquid)	127 1226		

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)	123 3308	Liquefied gas, poisonous, n.o.s.	123 1955
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	123 3308	Liquefied gas, poisonous, n.o.s.	123 3162
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	123 3308	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123 3162
Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	123 3308	Liquefied gas, poisonous, n.o.s.	123 1955
Liquefied gas, poisonous, flammable, corrosive, n.o.s.	119 3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	123 3162
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119 3309	Liquefied gas, poisonous, n.o.s.	123 1955
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119 3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	123 3162
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119 3309	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	123 1955
Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119 3309	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	124 3310
Liquefied gas, poisonous, flammable, n.o.s.	119 3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124 3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	119 3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124 3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	119 3160	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124 3310
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	119 3160	Liquefied gas, poisonous, oxidizing, n.o.s.	124 3307
Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	119 3160	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124 3307

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)	119	3160
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	119	3160
Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3307	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	119	3160
Liquefied gas, toxic, corrosive, n.o.s.	123	3308	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	119	3160
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)	123	3308	Liquefied gas, toxic, n.o.s.	123	1950
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	123	3308	Liquefied gas, toxic, n.o.s.	123	3160
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	1950
Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	123	3308	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	123	3160
Liquefied gas, toxic, flammable, corrosive, n.o.s.	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	1950
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	123	3160
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	1950
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	123	3160
Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	119	3309	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	1950
Liquefied gas, toxic, flammable, n.o.s.	119	3160	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	123	3160
			Liquefied gas, toxic, oxidizing, corrosive, n.o.s.	124	3310
			Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	124	3310
			Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	124	3310

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	124	3310	Lithium batteries contained in equipment	138	3091
Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	124	3310	Lithium batteries packed with equipment	138	3091
Liquefied gas, toxic, oxidizing, n.o.s.	124	3307	Lithium borohydride	138	1413
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	124	3307	Lithium chromate	171	9134
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	124	3307	Lithium ferrosilicon	139	2830
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	124	3307	Lithium hydride	138	1414
Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	124	3307	Lithium hydride, fused solid	138	2805
Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air	121	1058	Lithium hydroxide, monohydrate	154	2680
Liquefied natural gas (cryogenic liquid)	115	1972	Lithium hydroxide, solid	154	2680
Liquefied petroleum gas	115	1075	Lithium hydroxide, solution	154	2679
Lithium	138	1415	Lithium hypochlorite, dry	140	1471
Lithium acetylide-Ethylenediamine complex	138	2813	Lithium hypochlorite mixture	140	1471
Lithium alkyls	135	2445	Lithium hypochlorite mixtures, dry	140	1471
Lithium aluminum hydride	138	1410	Lithium nitrate	140	2722
Lithium aluminum hydride, ethereal	138	1411	Lithium nitride	138	2806
Lithium amide	139	1412	Lithium peroxide	143	1472
Lithium batteries	138	3090	Lithium silicon	138	1417
Lithium batteries, liquid or solid cathode	138	3090	LNG (cryogenic liquid)	115	1972
			London purple	151	1621
			LPG	115	1075
			Magnesium	138	1869
			Magnesium, in pellets, turnings or ribbons	138	1869
			Magnesium alkyls	135	3053
			Magnesium alloys, with more than 50% Magnesium, in pellets, turnings or ribbons	138	1869
			Magnesium alloys powder	138	1418
			Magnesium aluminum phosphide	139	1419
			Magnesium arsenate	151	1622
			Magnesium bisulfite solution	154	2693
			Magnesium bisulphite solution	154	2693

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Magnesium bromate	140 1473	Medicine, liquid, flammable, poisonous, n.o.s.	131 324
Magnesium chlorate	140 2723	Medicine, liquid, flammable, toxic, n.o.s.	131 324
Magnesium chloride and Chlorate mixture	140 1459	Medicine, liquid, poisonous, n.o.s.	151 185
Magnesium diamide	135 2004	Medicine, liquid, toxic, n.o.s.	151 185
Magnesium diphenyl	135 2005	Medicine, solid, poisonous, n.o.s.	151 324
Magnesium fluorosilicate	151 2853	Medicine, solid, toxic, n.o.s.	151 324
Magnesium granules, coated	138 2950	Medicines, corrosive, liquid, n.o.s.	154 176
Magnesium hydride	138 2010	Medicines, corrosive, solid, n.o.s.	154 175
Magnesium nitrate	140 1474	Medicines, flammable, liquid, n.o.s.	128 199
Magnesium perchlorate	140 1475	Medicines, flammable, solid, n.o.s.	133 132
Magnesium peroxide	140 1476	Medicines, oxidizing substances, solid, n.o.s.	140 147
Magnesium phosphide	139 2011	Medicines, poisonous, liquid, n.o.s.	153 281
Magnesium powder	138 1418	Medicines, poisonous, solid, n.o.s.	154 281
Magnesium scrap	138 1869	Medicines, toxic, liquid, n.o.s.	153 281
Magnesium silicide	138 2624	Medicines, toxic, solid, n.o.s.	154 281
Magnesium silicofluoride	151 2853	p-Menthane hydroperoxide	147 212
Magnetized material	171 2807	Mercaptan mixture, aliphatic	131 122
Maleic acid	156 2215	Mercaptan mixture, liquid, flammable, poisonous, n.o.s.	131 122
Maleic anhydride	156 2215	Mercaptan mixture, liquid, flammable, toxic, n.o.s.	131 122
Malononitrile	153 2647	Mercaptan mixture, liquid, poisonous, flammable, n.o.s.	131 307
Maneb	135 2210	Mercaptan mixture, liquid, toxic, flammable, n.o.s.	131 307
Maneb, stabilized	135 2968		
Maneb preparation, stabilized	135 2968		
Maneb preparation, with not less than 60% Maneb	135 2210		
Manganese nitrate	140 2724		
Manganese resinate	133 1330		
Matches, fusee	133 2254		
Matches, safety	133 1944		
Matches, "strike anywhere"	133 1331		
Matches, wax "vesta"	133 1945		
Medical waste, n.o.s.	158 3291		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Mercaptan mixtures, liquid, n.o.s.	131	1228	Mercury based pesticide, liquid, poisonous	151	3012
Mercaptan mixtures, liquid, n.o.s.	131	3071	Mercury based pesticide, liquid, poisonous, flammable	131	3011
Mercaptans, liquid, flammable, poisonous, n.o.s.	131	1228	Mercury based pesticide, liquid, toxic	151	3012
Mercaptans, liquid, flammable, toxic, n.o.s.	131	1228	Mercury based pesticide, liquid, toxic, flammable	131	3011
Mercaptans, liquid, n.o.s.	131	3071	Mercury based pesticide, solid, poisonous	151	2777
Mercaptans, liquid, poisonous, flammable, n.o.s.	131	3071	Mercury based pesticide, solid, toxic	151	2777
Mercaptans, liquid, toxic, flammable, n.o.s.	131	3071	Mercury benzoate	154	1631
Mercuric arsenate	151	1623	Mercury bisulfate	151	1633
Mercuric bromide	154	1634	Mercury bisulphate	151	1633
Mercuric chloride	154	1624	Mercury bromides	154	1634
Mercuric cyanide	154	1636	Mercury compound, liquid, n.o.s.	151	2024
Mercuric nitrate	141	1625	Mercury compound, solid, n.o.s.	151	2025
Mercuric oxycyanide	151	1642	Mercury cyanide	154	1636
Mercuric potassium cyanide	157	1626	Mercury gluconate	151	1637
Mercuric sulfate	151	1645	Mercury iodide	151	1638
Mercuric sulphate	151	1645	Mercury metal	172	2809
Mercurous bromide	154	1634	Mercury nucleate	151	1639
Mercurous nitrate	141	1627	Mercury oleate	151	1640
Mercurous sulfate	151	1628	Mercury oxide	151	1641
Mercurous sulphate	151	1628	Mercury oxycyanide, desensitized	151	1642
Mercury	172	2809	Mercury potassium iodide	151	1643
Mercury, metallic	172	2809	Mercury salicylate	151	1644
Mercury acetate	151	1629	Mercury sulfate	151	1645
Mercury ammonium chloride	151	1630	Mercury sulphate	151	1645
Mercury based pesticide, liquid, flammable, poisonous	131	2778	Mercury thiocyanate	151	1646
Mercury based pesticide, liquid, flammable, toxic	131	2778	Mesityl oxide	129	1229
			Metal alkyl, solution, n.o.s.	135	9195
			Metal alkyl halides, n.o.s.	138	3049

Name of Material	Guide ID No. No.	
Metal alkyl hydrides, n.o.s.	138	3050
Metal alkyls, n.o.s.	135	2003
Metal aryl halides, n.o.s.	138	3049
Metal aryl hydrides, n.o.s.	138	3050
Metal aryls, n.o.s.	135	2003
Metal carbonyls, n.o.s.	151	3281
Metal catalyst, dry	135	2881
Metal catalyst, wetted	170	1378
Metaldehyde	133	1332
Metal hydrides, flammable, n.o.s.	170	3182
Metal hydrides, water-reactive, n.o.s.	138	1409
Metallic substance, water- reactive, n.o.s.	138	3208
Metallic substance, water- reactive, self-heating, n.o.s.	138	3209
Metal powder, flammable, n.o.s.	170	3089
Metal powder, self-heating, n.o.s.	135	3189
Metal salts of organic compounds, flammable, n.o.s.	133	3181
Methacrylaldehyde	131P	2396
Methacrylaldehyde, inhibited	131P	2396
Methacrylic acid, inhibited	153P	2531
Methacrylonitrile, inhibited	131P	3079
Methallyl alcohol	129	2614
Methane	115	1971
Methane, compressed	115	1971
Methane, refrigerated liquid (cryogenic liquid)	115	1972
Methane and Hydrogen mixture, compressed	115	2034
Methanesulfonyl chloride	156	3246
Methanesulphonyl chloride	156	3246

Name of Material	Guide ID No. No.	
Methanol	131	123
Methoxymethyl isocyanate	155	260
4-Methoxy-4-methyl- pentan-2-one	127	229
1-Methoxy-2-propanol	129	309
Methyl acetate	129	123
Methyl acetone	127	123
Methylacetylene and Propadiene mixture, stabilized	116P	106
Methyl acrylate, inhibited	129P	191
Methylal	127	123
Methyl alcohol	131	123
Methylallyl chloride	129P	255
Methylamine, anhydrous	118	106
Methylamine, aqueous solution	132	123
Methylamyl acetate	129	123
Methylamyl alcohol	129	205
Methyl amyl ketone	127	111
N-Methylaniline	153	229
Methyl benzoate	152	293
alpha-Methylbenzyl alcohol	153	293
Methylbenzyl alcohol (alpha)	153	293
Methyl bromide	123	106
Methyl bromide and Chloropicrin mixtures	123	158
Methyl bromide and Ethylene dibromide mixture, liquid	151	164
Methyl bromide and more than 2% Chloropicrin mixture, liquid	123	158
Methyl bromide and nonflammable, nonliquefied compressed gas mixture	123	195
Methyl bromoacetate	155	264

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Methylbromoacetone	159 —	Methyl formate	129 1243
3-Methylbutan-2-one	127 2397	2-Methylfuran	127 2301
2-Methyl-1-butene	127 2459	2-Methyl-2-heptanethiol	131 3023
2-Methyl-2-butene	127 2460	5-Methylhexan-2-one	127 2302
3-Methyl-1-butene	127 2561	Methylhydrazine	131 1244
N-Methylbutylamine	132 2945	Methyl iodide	151 2644
Methyl tert-butyl ether	127 2398	Methyl isobutyl carbinol	129 2053
Methyl butyrate	129 1237	Methyl isobutyl ketone	127 1245
Methyl chloride	115 1063	Methyl isobutyl ketone peroxide	147 2126
Methyl chloride and Chloropicrin mixtures	119 1582	Methyl isocyanate	155 2480
Methyl chloride and Methylene chloride mixture	115 1912	Methyl isopropenyl ketone, inhibited	127P 1246
Methyl chloroacetate	155 2295	Methyl isothiocyanate	131 2477
Methyl chloroformate	155 1238	Methyl isovalerate	130 2400
Methyl chloromethyl ether	131 1239	Methyl magnesium bromide in Ethyl ether	135 1928
Methyl 2-chloropropionate	132 2933	Methyl mercaptan	117 1064
Methylchlorosilane	119 2534	Methyl methacrylate monomer, inhibited	129P 1247
Methyl cyanide	131 1648	Methyl methacrylate monomer, uninhibited	129P 1247
Methylcyclohexane	128 2296	4-Methylmorpholine	132 2535
Methylcyclohexanols	129 2617	N-Methylmorpholine	132 2535
Methylcyclohexanone	127 2297	Methylmorpholine	132 2535
Methylcyclopentane	128 2298	Methyl nitrite	116 2455
Methyl dichloroacetate	155 2299	N-Methyl-N'-Nitro-N-Nitrosoguanidine	133 1325
Methyldichloroarsine	152 1556	Methyl orthosilicate	155 2606
Methyldichlorosilane	139 1242	Methyl parathion, liquid	152 2783
Methylene chloride	160 1593	Methyl parathion, liquid	152 3018
Methylene chloride and Methyl chloride mixture	115 1912	Methyl parathion, mixture, dry	152 2783
Methyl ethyl ether	115 1039	Methyl parathion, solid	152 2783
Methyl ethyl ketone	127 1193	Methylpentadiene	127 2461
Methyl ethyl ketone peroxide	147 2550	Methyl pentane	128 2462
2-Methyl-5-ethylpyridine	153 2300		
Methyl fluoride	115 2454		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
2-Methylpentan-2-ol	129	2560	Naphtha, solvent	128	1250
Methylphenyldichlorosilane	156	2437	Naphthalene, crude	133	1330
Methyl phosphonic dichloride	137	9206	Naphthalene, molten	133	2300
Methyl phosphonous dichloride	135	2845	Naphthalene, refined	133	1330
1-Methylpiperidine	132	2399	Naphthenic acid	171	9130
Methyl propionate	129	1248	alpha-Naphthylamine	153	2070
Methyl propyl ether	127	2612	Naphthylamine (alpha)	153	2070
Methyl propyl ketone	127	1249	beta-Naphthylamine	153	1650
Methyltetrahydrofuran	127	2536	Naphthylamine (beta)	153	1650
Methyl trichloroacetate	156	2533	Naphthylthiourea	153	1650
Methyltrichlorosilane	155	1250	Naphthylurea	153	1650
alpha-Methylvaleraldehyde	130	2367	Natural gas, compressed	115	1970
Methyl valeraldehyde (alpha)	130	2367	Natural gas, refrigerated liquid (cryogenic liquid)	115	1970
Methyl vinyl ketone	131P	1251	Natural gasoline	128	1250
Methyl vinyl ketone, stabilized	131P	1251	Neohexane	128	1200
Mevinphos	152	2783	Neon	121	1060
Mexacarbate	151	2757	Neon, compressed	121	1060
M.I.B.C.	129	2053	Neon, refrigerated liquid (cryogenic liquid)	120	1910
Mining reagent, liquid	153	2022	Nickel ammonium sulfate	171	9130
Molybdenum pentachloride	156	2508	Nickel ammonium sulphate	171	9130
Monoethanolamine	153	2491	Nickel carbonyl	131	1250
Mononitrotoluidines	153	2660	Nickel catalyst, dry	135	2880
Monopropylamine	132	1277	Nickel chloride	151	9130
Morpholine	132	2054	Nickel cyanide	151	1650
Morpholine, aqueous mixture	154	1760	Nickel hydroxide	154	9140
Morpholine, aqueous mixture	132	2054	Nickel nitrate	140	2720
Motor fuel anti-knock compound	131	1649	Nickel nitrite	140	2720
Motor fuel anti-knock mixture	131	1649	Nickel sulfate	154	9140
Motor spirit	128	1203	Nickel sulphate	154	9140
Muriatic acid	157	1789	Nicotine	151	1650
Musk xylene	149	2956	Nicotine compound, liquid, n.o.s.	151	3140
Naphtha	128	2553			
Naphtha, petroleum	128	1255			

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Nicotine compound, solid, n.o.s.	151	1655	Nitric oxide and Nitrogen dioxide mixture	124	1975
Nicotine hydrochloride	151	1656	Nitric oxide and Nitrogen tetroxide mixture	124	1975
Nicotine hydrochloride, solution	151	1656	Nitriles, flammable, poisonous, n.o.s.	131	3273
Nicotine preparation, liquid, n.o.s.	151	3144	Nitriles, flammable, toxic, n.o.s.	131	3273
Nicotine preparation, solid, n.o.s.	151	1655	Nitriles, poisonous, flammable, n.o.s.	131	3275
Nicotine salicylate	151	1657	Nitriles, poisonous, n.o.s.	151	3276
Nicotine sulfate, solid	151	1658	Nitriles, toxic, flammable, n.o.s.	131	3275
Nicotine sulfate, solution	151	1658	Nitriles, toxic, n.o.s.	151	3276
Nicotine sulphate, solid	151	1658	Nitrites, inorganic, aqueous solution, n.o.s.	140	3219
Nicotine sulphate, solution	151	1658	Nitrites, inorganic, n.o.s.	140	2627
Nicotine tartrate	151	1659	Nitroanilines	153	1661
Nitrate, n.o.s.	140	1477	Nitroanisole	152	2730
Nitrates, inorganic, aqueous solution, n.o.s.	140	3218	Nitroanisole, liquid	152	2730
Nitrates, inorganic, n.o.s.	140	1477	Nitroanisole, solid	152	2730
Nitrating acid, spent	157	1826	Nitrobenzene	152	1662
Nitrating acid mixture	157	1796	Nitrobenzenesulfonic acid	153	2305
Nitrating acid mixture, spent	157	1826	Nitrobenzenesulphonic acid	153	2305
Nitric acid, 40% or less	154	1760	Nitrobenzotrifluorides	152	2306
Nitric acid, fuming	157	2032	Nitrobromobenzene	152	2732
Nitric acid, other than red fuming	157	2031	Nitrobromobenzene, liquid	152	2732
Nitric acid, other than red fuming, with more than 70% Nitric acid	157	2031	Nitrobromobenzene, solid	152	2732
Nitric acid, other than red fuming, with not more than 70% Nitric acid	157	2031	Nitrocellulose, block, wet, with not less than 25% alcohol	127	2059
Nitric acid, red fuming	157	2032	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% alcohol or solvent	127	2059
Nitric oxide	124	1660	Nitrocellulose, colloided, granular or flake, wet, with not less than 20% water	113	2555
Nitric oxide, compressed	124	1660			
Nitric oxide and Dinitrogen tetroxide mixture	124	1975			

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Nitrocellulose, solution, flammable	127	2059	Nitrogen dioxide and Nitric oxide mixture	124	197
Nitrocellulose, solution, in a flammable liquid	127	2059	Nitrogen peroxide, liquid	124	106
Nitrocellulose, wet, with not less than 30% alcohol or solvent	113	2556	Nitrogen tetroxide, liquid	124	106
Nitrocellulose membrane filters	133	3270	Nitrogen tetroxide and Nitric oxide mixture	124	197
Nitrocellulose mixture, without plasticizer, without pigment	133	2557	Nitrogen trifluoride	122	245
Nitrocellulose mixture, without plasticizer, with pigment	133	2557	Nitrogen trifluoride, compressed	122	245
Nitrocellulose mixture, with plasticizer, without pigment	133	2557	Nitrogen trioxide	124	242
Nitrocellulose mixture, with plasticizer, with pigment	133	2557	Nitroglycerin, solution in alcohol, with more than 1% but not more than 5% Nitroglycerin	127	306
Nitrocellulose with alcohol	113	2556	Nitroglycerin, solution in alcohol, with not more than 1% Nitroglycerin	127	120
Nitrocellulose with not less than 25% alcohol	113	2556	Nitroglycerin mixture with more than 2% but not more than 10% Nitroglycerin, desensitized	113	3319
Nitrocellulose with plasticizing substance	133	2557	Nitroguanidine (Picrite), wetted with not less than 20% water	113	1336
Nitrocellulose with water, not less than 25% water	113	2555	Nitroguanidine, wetted with not less than 20% water	113	1336
Nitrochlorobenzenes, liquid	152	1578	Nitrohydrochloric acid	157	1798
Nitrochlorobenzenes, solid	152	1578	Nitromethane	129	1261
3-Nitro-4-chlorobenzotrifluoride	152	2307	Nitronaphthalene	133	2538
Nitrocresols	153	2446	Nitrophenols	153	1663
Nitroethane	129	2842	Nitropropanes	129	2608
Nitrogen	121	1066	p-Nitrosodiethylaniline	135	—
Nitrogen, compressed	121	1066	p-Nitrosodimethylaniline	135	1369
Nitrogen, refrigerated liquid (cryogenic liquid)	120	1977	Nitrostarch, wet, with not less than 30% alcohol or solvent	113	1337
Nitrogen and Rare gases mixture	121	1981	Nitrostarch, wetted with not less than 20% water	113	1337
Nitrogen and Rare gases mixture, compressed	121	1981	Nitrostarch, wetted with not less than 30% solvent	113	1337
Nitrogen dioxide	124	1067			
Nitrogen dioxide, liquefied	124	1067			

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Nitrosyl chloride	125	1069	Oleum	137	1831
Nitrosylsulfuric acid	157	2308	Oleum, with less than 30% free Sulfur trioxide	137	1831
Nitrosylsulphuric acid	157	2308	Oleum, with less than 30% free Sulphur trioxide	137	1831
Nitrotoluenes	152	1664	Oleum, with not less than 30% free Sulfur trioxide	137	1831
Nitrotoluenes, liquid	152	1664	Oleum, with not less than 30% free Sulphur trioxide	137	1831
Nitrotoluenes, solid	152	1664	Oleum, with not less than 30% free Sulphur trioxide	137	1831
Nitrotoluidines (mono)	153	2660	Organic peroxide, liquid, n.o.s.	146	9183
Nitrous oxide	122	1070	Organic peroxide, solution, n.o.s.	146	9183
Nitrous oxide, compressed	122	1070	Organic peroxide, solid, n.o.s.	146	9187
Nitrous oxide, refrigerated liquid	122	2201	Organic peroxides, mixtures	146	2756
Nitrous oxide and Carbon dioxide mixture	126	1015	Organic peroxides, n.o.s. (including trial quantities)	148	2899
Nitroxylene	152	1665	Organic peroxides, samples, n.o.s.	146	2255
Nitroxylol	152	1665	Organic peroxide type B, liquid	146	3101
Nonanes	128	1920	Organic peroxide type B, liquid, temperature controlled	148	3111
Nonyltrichlorosilane	156	1799	Organic peroxide type B, solid	146	3102
2,5-Norbornadiene	127P	2251	Organic peroxide type B, solid, temperature controlled	148	3112
2,5-Norbornadiene, inhibited	127P	2251	Organic peroxide type C, liquid	146	3103
Octadecyltrichlorosilane	156	1800	Organic peroxide type C, liquid, temperature controlled	148	3113
Octadiene	128P	2309	Organic peroxide type C, solid	146	3104
Octafluorobut-2-ene	126	2422	Organic peroxide type C, solid, temperature controlled	148	3114
Octafluorocyclobutane	126	1976	Organic peroxide type D, liquid	145	3105
Octafluoropropane	126	2424	Organic peroxide type D, liquid, temperature controlled	148	3115
Octanes	128	1262	Organic peroxide type D, solid	145	3106
Octanoyl peroxide	148	2129	Organic peroxide type D, solid, temperature controlled	148	3116
Octyl aldehydes	129	1191			
tert-Octyl mercaptan	131	3023			
Octyltrichlorosilane	156	1801			
Oil, n.o.s., flash point not less than 93° C (200° F)	171	9277			
Oil, petroleum, n.o.s.	128	1270			
Oil gas	119	1071			
Oil gas, compressed	119	1071			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Organic peroxide type E, liquid	145 3107	Organochlorine pesticide, liquid, 131 2996	
Organic peroxide type E, liquid, temperature controlled	148 3117	poisonous, flammable	
Organic peroxide type E, solid	145 3108	Organochlorine pesticide, liquid, 151 2996	
Organic peroxide type E, solid, temperature controlled	148 3118	toxic	
Organic peroxide type F, liquid	145 3109	Organochlorine pesticide, liquid, 131 2996	
Organic peroxide type F, liquid, temperature controlled	148 3119	toxic, flammable	
Organic peroxide type F, solid	145 3110	Organochlorine pesticide, solid, 151 2761	
Organic peroxide type F, solid, temperature controlled	148 3120	poisonous	
Organic phosphate, dry	152 2783	Organochlorine pesticide, solid, 151 2761	
Organic phosphate, solid	152 2783	toxic	
Organic phosphate compound, dry	152 2783	Organometallic compound, 151 3282	
Organic phosphate compound, solid	152 2783	poisonous, n.o.s.	
Organic phosphate compound mixed with compressed gas	123 1955	Organometallic compound, 151 3282	
Organic phosphate mixed with compressed gas	123 1955	toxic, n.o.s.	
Organic phosphorus compound, dry	152 2783	Organometallic compound, 138 3207	
Organic phosphorus compound, solid	152 2783	water-reactive, flammable, n.o.s.	
Organic phosphorus compound mixed with compressed gas	123 1955	Organometallic compound 138 3207	
Organic phosphorus compound, dry	152 2783	dispersion, water-reactive, flammable, n.o.s.	
Organic phosphorus compound, solid	152 2783	Organometallic compound 138 3207	
Organic phosphorus compound mixed with compressed gas	123 1955	solution, water-reactive, flammable, n.o.s.	
Organic pigments, self-heating	135 3313	Organophosphorus compound, 131 3279	
Organoarsenic compound, n.o.s.	151 3280	poisonous, flammable, n.o.s.	
Organochlorine pesticide, liquid, flammable, poisonous	131 2762	Organophosphorus compound, 151 3278	
Organochlorine pesticide, liquid, flammable, toxic	131 2762	poisonous, n.o.s.	
Organochlorine pesticide, liquid, poisonous	151 2996	Organophosphorus compound, 131 3279	
		toxic, flammable, n.o.s.	
		Organophosphorus compound, 151 3278	
		toxic, n.o.s.	
		Organophosphorus pesticide, 131 2784	
		liquid, flammable, poisonous	
		Organophosphorus pesticide, 131 2784	
		liquid, flammable, toxic	
		Organophosphorus pesticide, 152 3018	
		liquid, poisonous	
		Organophosphorus pesticide, 131 3017	
		liquid, poisonous, flammable	

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Organophosphorus pesticide, liquid, toxic	152 3018	Oxidizer, corrosive, liquid, n.o.s.	140 9193
Organophosphorus pesticide, liquid, toxic, flammable	131 3017	Oxidizer, corrosive, solid, n.o.s.	140 9194
Organophosphorus pesticide, solid, poisonous	152 2783	Oxidizer, poisonous, liquid, n.o.s.	142 9199
Organophosphorus pesticide, solid, toxic	152 2783	Oxidizer, poisonous, solid, n.o.s.	141 9200
Organotin compound, liquid, n.o.s.	153 2788	Oxidizing liquid, corrosive, n.o.s.	140 3098
Organotin compound, solid, n.o.s.	153 3146	Oxidizing liquid, n.o.s.	140 3139
Organotin pesticide, liquid, flammable, poisonous	131 2787	Oxidizing liquid, poisonous, n.o.s.	142 3099
Organotin pesticide, liquid, flammable, toxic	131 2787	Oxidizing liquid, toxic, n.o.s.	142 3099
Organotin pesticide, liquid, poisonous	153 3020	Oxidizing solid, corrosive, n.o.s.	141 3085
Organotin pesticide, liquid, poisonous, flammable	131 3019	Oxidizing solid, flammable, n.o.s.	140 3137
Organotin pesticide, liquid, toxic	153 3020	Oxidizing solid, n.o.s.	140 1479
Organotin pesticide, liquid, toxic, flammable	131 3019	Oxidizing solid, poisonous, n.o.s.	141 3087
Organotin pesticide, solid, poisonous	153 2786	Oxidizing solid, self-heating, n.o.s.	135 3100
Organotin pesticide, solid, toxic	153 2786	Oxidizing solid, toxic, n.o.s.	141 3087
ORM-A, n.o.s.	159 1693	Oxidizing solid, water-reactive, n.o.s.	144 3121
ORM-B, n.o.s.	154 1760	Oxidizing substances, liquid, corrosive, n.o.s.	140 3098
ORM-E, liquid, n.o.s.	171 9188	Oxidizing substances, liquid, n.o.s.	140 3139
ORM-E, solid, n.o.s.	171 9188	Oxidizing substances, liquid, poisonous, n.o.s.	142 3099
Osmium tetroxide	154 2471	Oxidizing substances, liquid, toxic, n.o.s.	142 3099
Other regulated substance	171 8027	Oxidizing substances, self-heating, n.o.s.	135 3100
Other regulated substances, liquid, n.o.s.	171 3082	Oxidizing substances, solid, corrosive, n.o.s.	141 3085
Other regulated substances, solid, n.o.s.	171 3077	Oxidizing substances, solid, flammable, n.o.s.	140 3137
Oxalates, water soluble	154 2449		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Oxidizing substances, solid, n.o.s.	140	1479	Paraldehyde	129	1264
Oxidizing substances, solid, poisonous, n.o.s.	141	3087	Parathion	152	2783
Oxidizing substances, solid, self-heating, n.o.s.	135	3100	Parathion and compressed gas mixture	123	1967
Oxidizing substances, solid, toxic, n.o.s.	141	3087	Parathion mixture, dry	152	2783
Oxidizing substances, solid, which in contact with water emit flammable gases, n.o.s.	144	3121	Parathion mixture, liquid	152	2783
Oxygen	122	1072	PCB	171	2315
Oxygen, compressed	122	1072	Pelargonyl peroxide	148	2130
Oxygen, refrigerated liquid (cryogenic liquid)	122	1073	Pentaborane	135	1380
Oxygen and Carbon dioxide mixture	122	1014	Pentachloroethane	151	1669
Oxygen and Carbon dioxide mixture, compressed	122	1014	Pentachlorophenol	154	3155
Oxygen and Rare gases mixture	122	1980	Pentafluoroethane	126	3220
Oxygen and Rare gases mixture, compressed	122	1980	Pentafluoroethane and Ethylene oxide mixture, with not more than 7.9% Ethylene oxide	126	3298
Oxygen difluoride	124	2190	Pentamethylheptane	128	2286
Oxygen difluoride, compressed	124	2190	Pentan-2,4-dione	127	2310
Oxygen generators, small	140	8037	n-Pentane	128	1265
Paint (corrosive)	154	1760	2,4-Pentanedione	127	2310
Paint (corrosive)	153	3066	Pentane-2,4-dione	127	2310
Paint (flammable)	127	1263	Pentanes	128	1265
Paint related material (corrosive)	154	1760	1-Pentene	127	1108
Paint related material (corrosive)	153	3066	1-Pentol	153P	2705
Paint related material (flammable)	127	1263	Peracetic acid, solution	147	2131
Paper, unsaturated oil treated	133	1379	Percarbonates, inorganic, n.o.s.	140	3217
Paraformaldehyde	133	2213	Perchlorate, n.o.s.	140	1481
			Perchlorates, inorganic, aqueous solution, n.o.s.	140	3211
			Perchlorates, inorganic, n.o.s.	140	1481
			Perchloric acid, with more than 50% but not more than 72% acid	143	1873
			Perchloric acid, with not more than 50% acid	140	1802
			Perchloroethylene	160	1897

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Perchloromethyl mercaptan	157 1670	Pesticide, water-reactive	135 2210
Perchloryl fluoride	124 3083	Petrol	128 1203
Perfluoroethyl vinyl ether	115 3154	Petroleum crude oil	128 1267
Perfluoro(ethylvinyl ether)	115 3154	Petroleum distillates, n.o.s.	128 1268
Perfluoromethyl vinyl ether	115 3153	Petroleum ether	128 1271
Perfluoro(methylvinyl ether)	115 3153	Petroleum gases, liquefied	115 1075
Perfumery products, with flammable solvents	127 1266	Petroleum naphtha	128 1255
Permanganate, n.o.s.	140 1482	Petroleum oil	128 1270
Permanganates, inorganic, aqueous solution, n.o.s.	140 3214	Petroleum products, n.o.s.	128 1268
Permanganates, inorganic, n.o.s.	140 1482	Petroleum spirit	128 1271
Peroxides, inorganic, n.o.s.	140 1483	Phenacyl bromide	153 2645
Peroxyacetic acid, solution	147 2131	Phenetidines	153 2311
Persulfates, inorganic, aqueous solution, n.o.s.	140 3216	Phenol, liquid	153 2821
Persulfates, inorganic, n.o.s.	140 3215	Phenol, molten	153 2312
Persulphates, inorganic, aqueous solution, n.o.s.	140 3216	Phenol, solid	153 1671
Persulphates, inorganic, n.o.s.	140 3215	Phenol solution	153 2821
Pesticide, liquid, flammable, poisonous	131 3021	Phenolates, liquid	154 2904
Pesticide, liquid, flammable, toxic	131 3021	Phenolates, solid	154 2905
Pesticide, liquid, poisonous, flammable, n.o.s.	131 2903	Phenolsulfonic acid, liquid	153 1803
Pesticide, liquid, poisonous, n.o.s.	151 2902	Phenolsulphonic acid, liquid	153 1803
Pesticide, liquid, toxic, flammable, n.o.s.	131 2903	Phenoxy pesticide, liquid, flammable, poisonous	131 2766
Pesticide, liquid, toxic, n.o.s.	151 2902	Phenoxy pesticide, liquid, flammable, toxic	131 2766
Pesticide, solid, poisonous	151 2588	Phenoxy pesticide, liquid, poisonous	152 3000
Pesticide, solid, poisonous, n.o.s.	151 2588	Phenoxy pesticide, liquid, poisonous, flammable	131 2999
Pesticide, solid, toxic, n.o.s.	151 2588	Phenoxy pesticide, liquid, toxic	152 3000
		Phenoxy pesticide, liquid, toxic, flammable	131 2999
		Phenoxy pesticide, solid, poisonous	152 2765
		Phenoxy pesticide, solid, toxic	152 2765

Name of Material	Guide ID	No. No.
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Phenylacetonitrile, liquid	152	2470
Phenylacetyl chloride	156	2577
Phenylcarbylamine chloride	151	1672
Phenyl chloroformate	156	2746
Phenyldichloroarsine	152	1556
Phenylenediamines	153	1673
Phenylhydrazine	153	2572
Phenyl isocyanate	155	2487
Phenyl mercaptan	131	2337
Phenylmercuric acetate	151	1674
Phenylmercuric compound, n.o.s.	151	2026
Phenylmercuric hydroxide	151	1894
Phenylmercuric nitrate	151	1895
Phenylphosphorus dichloride	137	2798
Phenylphosphorus thiodichloride	137	2799
Phenyltrichlorosilane	156	1804
Phenyl urea pesticide, liquid, flammable, poisonous	131	2768
Phenyl urea pesticide, liquid, flammable, toxic	131	2768
Phenyl urea pesticide, liquid, poisonous	151	3002
Phenyl urea pesticide, liquid, poisonous, flammable	131	3001
Phenyl urea pesticide, liquid, toxic	151	3002
Phenyl urea pesticide, liquid, toxic, flammable	131	3001
Phenyl urea pesticide, solid, poisonous	151	2767
Phenyl urea pesticide, solid, toxic	151	2767
Phosgene	125	1076

Name of Material	Guide ID	No. No.
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9-Phosphabicyclononanes	135	2940
Phosphine	119	2199
Phosphoric acid	154	1805
Phosphoric anhydride	137	1807
Phosphorous acid	154	2834
Phosphorous acid, ortho	154	2834
Phosphorus, amorphous	133	1338
Phosphorus, amorphous, red	133	1338
Phosphorus, white, dry or under water or in solution	136	1381
Phosphorus, white, molten	136	2447
Phosphorus, yellow, dry or under water or in solution	136	1381
Phosphorus heptasulfide, free from yellow and white Phosphorus	139	1339
Phosphorus heptasulphide, free from yellow and white Phosphorus	139	1339
Phosphorus oxybromide	137	1939
Phosphorus oxybromide, molten	137	2576
Phosphorus oxybromide, solid	137	1939
Phosphorus oxychloride	137	1810
Phosphorus pentabromide	137	2691
Phosphorus pentachloride	137	1806
Phosphorus pentafluoride	125	2198
Phosphorus pentafluoride, compressed	125	2198
Phosphorus pentasulfide, free from yellow and white Phosphorus	139	1340
Phosphorus pentasulphide, free from yellow and white Phosphorus	139	1340
Phosphorus pentoxide	137	1807

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Phosphorus sesquisulfide, free from yellow and white Phosphorus	139	1341	Picrite, wetted	113	1336
Phosphorus sesquisulphide, free from yellow and white Phosphorus	139	1341	Pinane hydroperoxide	147	2162
Phosphorus tribromide	137	1808	alpha-Pinene	127	2368
Phosphorus trichloride	137	1809	Pinene (alpha)	127	2368
Phosphorus trioxide	157	2578	Pine oil	129	1272
Phosphorus trisulfide, free from yellow and white Phosphorus	139	1343	Piperazine	153	2579
Phosphorus trisulphide, free from yellow and white Phosphorus	139	1343	Piperidine	132	2401
Phthalic anhydride	156	2214	Plastic, nitrocellulose-based, spontaneously combustible, n.o.s.	135	2006
Phthalimide derivative pesticide, liquid, flammable, poisonous	131	2774	Plastic molding material	171	—
Phthalimide derivative pesticide, liquid, flammable, toxic	131	2774	Plastic moulding compound	171	3314
Phthalimide derivative pesticide, liquid, poisonous	151	3008	Plastics, nitrocellulose-based, self-heating, n.o.s.	135	2006
Phthalimide derivative pesticide, liquid, poisonous, flammable	131	3007	Poison B, liquid, n.o.s.	153	2810
Phthalimide derivative pesticide, liquid, toxic	151	3008	Poison B, solid, n.o.s.	154	2811
Phthalimide derivative pesticide, liquid, toxic, flammable	131	3007	Poisonous gas, flammable, n.o.s.	119	1953
Phthalimide derivative pesticide, solid, poisonous	151	2773	Poisonous gas, n.o.s.	123	1955
Phthalimide derivative pesticide, solid, toxic	151	2773	Poisonous liquid, corrosive, inorganic, n.o.s.	154	3289
Picolines	130	2313	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	154	3289
Picric acid, wet, with not less than 10% water	113	1344	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	154	3289
			Poisonous liquid, corrosive, n.o.s.	154	2927
			Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)	154	2927
			Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	154	2927
			Poisonous liquid, flammable, n.o.s.	119	1953

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Poisonous liquid, flammable, n.o.s.	131 2929	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142 3122
Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131 2929	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	142 3122
Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131 2929	Poisonous liquid, water- reactive, n.o.s.	139 3123
Poisonous liquid, flammable, organic, n.o.s.	131 2929	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone A)	139 3123
Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131 2929	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone B)	139 3123
Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131 2929	Poisonous liquid, which in contact with water emits flammable gases, n.o.s.	139 3123
Poisonous liquid, inorganic, n.o.s.	151 3287	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	139 3123
Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151 3287	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	139 3123
Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151 3287	Poisonous solid, corrosive, inorganic, n.o.s.	154 3290
Poisonous liquid, n.o.s.	123 1955	Poisonous solid, corrosive, n.o.s.	154 2928
Poisonous liquid, n.o.s.	153 2810	Poisonous solid, flammable, n.o.s.	134 2930
Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)	153 2810	Poisonous solid, flammable, organic, n.o.s.	134 2930
Poisonous liquid, n.o.s. (Inhalation Hazard Zone B)	153 2810	Poisonous solid, inorganic, n.o.s.	151 3288
Poisonous liquid, organic, n.o.s.	153 2810	Poisonous solid, n.o.s.	154 2811
Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone A)	153 2810	Poisonous solid, organic, n.o.s.	154 2811
Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)	153 2810	Poisonous solid, oxidizing, n.o.s.	141 3086
Poisonous liquid, oxidizing, n.o.s.	142 3122		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Poisonous solid, self-heating, n.o.s.	136	3124	Potassium, metal liquid alloy	138	1420
Poisonous solid, water-reactive, n.o.s.	139	3125	Potassium arsenate	151	1677
Poisonous solid, which in contact with water emits flammable gases, n.o.s.	139	3125	Potassium arsenite	154	1678
Polyalkylamines, n.o.s.	132	2733	Potassium bifluoride	154	1811
Polyalkylamines, n.o.s.	132	2734	Potassium bisulfite solution	154	2693
Polyalkylamines, n.o.s.	153	2735	Potassium bisulphite solution	154	2693
Polyamines, flammable, corrosive, n.o.s.	132	2733	Potassium borohydride	138	1870
Polyamines, liquid, corrosive, flammable, n.o.s.	132	2734	Potassium bromate	140	1484
Polyamines, liquid, corrosive, n.o.s.	153	2735	Potassium chlorate	140	1485
Polyamines, solid, corrosive, n.o.s.	154	3259	Potassium chlorate, aqueous solution	140	2427
Polychlorinated biphenyls	171	2315	Potassium chlorate, solution	140	2427
Polyester resin kit	146	2255	Potassium chromate	171	9142
Polyester resin kit	127	3269	Potassium cuprocyanide	157	1679
Polyhalogenated biphenyls, liquid	171	3151	Potassium cyanide	157	1680
Polyhalogenated biphenyls, solid	171	3152	Potassium dichloro-s- triazinetrioxane, dry	141	2465
Polyhalogenated terphenyls, liquid	171	3151	Potassium dithionite	135	1929
Polyhalogenated terphenyls, solid	171	3152	Potassium fluoride	154	1812
Polymeric beads, expandable	133	2211	Potassium fluoroacetate	151	2628
Polymerizable material, stabilized with dry ice	171P	—	Potassium fluorosilicate	151	2655
Polystyrene beads, expandable	133	2211	Potassium hydrogendifluoride	154	1811
Potassium	138	2257	Potassium hydrogen fluoride, solution	154	1811
Potassium, metal	138	2257	Potassium hydrogen sulfate	154	2509
Potassium, metal alloys	138	1420	Potassium hydrogen sulphate	154	2509
			Potassium hydrosulfite	135	1929
			Potassium hydrosulphite	135	1929
			Potassium hydroxide, dry, solid	154	1813
			Potassium hydroxide, flake	154	1813
			Potassium hydroxide, solid	154	1813
			Potassium hydroxide, solution	154	1814
			Potassium metavanadate	151	2864

Name of Material	Guide ID No. No.	
Potassium monoxide	154	2033
Potassium nitrate	140	1486
Potassium nitrate and Sodium nitrate mixture	140	1499
Potassium nitrate and Sodium nitrite mixture	140	1487
Potassium nitrite	140	1488
Potassium perchlorate	140	1489
Potassium permanganate	140	1490
Potassium peroxide	144	1491
Potassium persulfate	140	1492
Potassium persulphate	140	1492
Potassium phosphide	139	2012
Potassium selenate	151	2630
Potassium selenite	151	2630
Potassium silicofluoride	151	2655
Potassium sodium alloys	138	1422
Potassium sulfide, anhydrous	135	1382
Potassium sulfide, hydrated, with not less than 30% water of crystallization	153	1847
Potassium sulfide, hydrated, with not less than 30% water of hydration	153	1847
Potassium sulfide, with less than 30% water of crystallization	135	1382
Potassium sulfide, with less than 30% water of hydration	135	1382
Potassium sulphide, anhydrous	135	1382
Potassium sulphide, hydrated, with not less than 30% water of crystallization	153	1847
Potassium sulphide, hydrated, with not less than 30% water of hydration	153	1847

Name of Material	Guide ID No. No.	
Potassium sulphide, with less than 30% water of crystallization	135	1382
Potassium sulphide, with less than 30% water of hydration	135	1382
Potassium superoxide	143	2466
Printing ink, flammable	129	1210
Propadiene, inhibited	116P	2200
Propadiene and Methylacetylene mixture, stabilized	116P	1060
Propane	115	1075
Propane	115	1978
Propane-Ethane mixture, refrigerated liquid	115	1961
Propane mixture	115	1075
Propane mixture	115	1978
Propanethiols	130	2402
n-Propanol	129	1274
Propargyl alcohol	131	1986
Propionaldehyde	129	1275
Propionic acid	132	1848
Propionic anhydride	156	2496
Propionitrile	131	2404
Propionyl chloride	132	1815
Propionyl peroxide	148	2132
n-Propyl acetate	129	1276
normal Propyl alcohol	129	1274
Propyl alcohol, normal	129	1274
Propylamine	132	1277
n-Propyl benzene	127	2364
Propyl chloride	129	1278
n-Propyl chloroformate	155	2740
Propylene	115	1075

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Propylene	115	1077	Pyrosulfuryl chloride	137	1817
Propylene, Ethylene and Acetylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene.	116	3138	Pyrosulphuryl chloride	137	1817
Propylene chlorohydrin	131	2611	Pyroxylin plastic, rod, sheet, roll, tube or scrap	133	1325
1,2-Propylenediamine	132	2258	Pyrrolidine	132	1922
1,3-Propylenediamine	132	2258	Quinoline	154	2656
Propylene dichloride	130	1279	Radioactive material, articles manufactured from depleted Uranium	161	2909
Propyleneimine, inhibited	131P	1921	Radioactive material, articles manufactured from natural Thorium	161	2909
Propylene oxide	127P	1280	Radioactive material, articles manufactured from natural Uranium	161	2909
Propylene oxide and Ethylene oxide mixture, with not more than 30% Ethylene oxide	129P	2983	Radioactive material, empty packages	161	2908
Propylene tetramer	128	2850	Radioactive material, excepted package, articles manufactured from depleted Uranium	161	2910
Propyl formates	129	1281	Radioactive material, excepted package, articles manufactured from natural Thorium	161	2910
n-Propyl isocyanate	155	2482	Radioactive material, excepted package, articles manufactured from natural Uranium	161	2910
Propyl mercaptan	130	2402	Radioactive material, excepted package, empty packaging	161	2910
n-Propyl nitrate	131	1865	Radioactive material, excepted package, instruments or articles	161	2910
Propyltrichlorosilane	155	1816	Radioactive material, excepted package, limited quantity of material	161	2910
Pyridine	129	1282	Radioactive material, fissile, n.o.s.	165	2918
Pyrophoric alloy, n.o.s.	135	1383			
Pyrophoric liquid, inorganic, n.o.s.	135	3194			
Pyrophoric liquid, n.o.s.	135	2845			
Pyrophoric liquid, organic, n.o.s.	135	2845			
Pyrophoric metal, n.o.s.	135	1383			
Pyrophoric organometallic compound, n.o.s.	135	3203			
Pyrophoric solid, inorganic, n.o.s.	135	3200			
Pyrophoric solid, n.o.s.	135	2846			
Pyrophoric solid, organic, n.o.s.	135	2846			

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Radioactive material, instruments and articles	161 2911	Refrigerant gas R-12B1	126 197
Radioactive material, limited quantity, n.o.s.	161 2910	Refrigerant gas R-13	126 102
Radioactive material, low specific activity (LSA), n.o.s.	162 2912	Refrigerant gas R-13 and Refrigerant gas R-23 azeotropic mixture with 60% Refrigerant gas R-13	126 259
Radioactive material, n.o.s.	163 2982	Refrigerant gas R-13B1	126 100
Radioactive material, special form, n.o.s.	164 2974	Refrigerant gas R-14, compressed	126 198
Radioactive material, surface contaminated objects (SCO)	162 2913	Refrigerant gas R-21	126 102
Radioactive material, Uranium hexafluoride, fissile	166 2977	Refrigerant gas R-22	126 101
Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	166 2978	Refrigerant gas R-23	126 198
Rags, oily	133 1856	Refrigerant gas R-23 and Refrigerant gas R-13 azeotropic mixture with 60% Refrigerant gas R-13	126 259
Rare gases and Nitrogen mixture	121 1981	Refrigerant gas R-32	115 325
Rare gases and Nitrogen mixture, compressed	121 1981	Refrigerant gas R-40	115 106
Rare gases and Oxygen mixture	122 1980	Refrigerant gas R-41	115 245
Rare gases and Oxygen mixture, compressed	122 1980	Refrigerant gas R-114	126 195
Rare gases mixture	121 1979	Refrigerant gas R-115	126 102
Rare gases mixture, compressed	121 1979	Refrigerant gas R-116, compressed	126 219
Receptacles, small, containing gas	115 2037	Refrigerant gas R-124	126 102
Red phosphorus	133 1338	Refrigerant gas R-125	126 322
Red phosphorus, amorphous	133 1338	Refrigerant gas R-133a	126 198
Refrigerant gas, n.o.s.	126 1078	Refrigerant gas R-134a	126 315
Refrigerant gas, n.o.s. (flammable)	115 1954	Refrigerant gas R-143a	115 203
Refrigerant gas R-12	126 1028	Refrigerant gas R-142b	115 251
Refrigerant gas R-12 and Refrigerant gas R-152a azeotropic mixture with 74% Refrigerant gas R-12	126 2602	Refrigerant gas R-152a	115 103
		Refrigerant gas R-152a and Refrigerant gas R-12 azeotropic mixture with 74% Refrigerant gas R-12	126 260
		Refrigerant gas R-161	115 245
		Refrigerant gas R-218	126 242

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Refrigerant gas R-227	126	3296	Refrigerating machines, containing non-flammable, non-poisonous, non- corrosive, liquefied gas	126	2857
Refrigerant gas R-500 (azeotropic mixture of Refrigerant gas R-12 and Refrigerant gas R-152a with approximately 74% Refrigerant gas R-12)	126	2602	Refrigerating machines, containing non-flammable, non-toxic, liquefied gas	126	2857
Refrigerant gas R-502	126	1973	Refrigerating machines, containing non-flammable, non-toxic, non-corrosive, liquefied gas	126	2857
Refrigerant gas R-503 (azeotropic mixture of Refrigerant gas R-13 and Refrigerant gas R-23 with approximately 60% Refrigerant gas R-13)	126	2599	Regulated medical waste, n.o.s.	158	3291
Refrigerant gas R-1216	126	1858	Regulated medical waste	158	9275
Refrigerant gas R-1132a	116P	1959	Resin solution	127	1866
Refrigerant gas R-1318	126	2422	Resorcinol	153	2876
Refrigerant gas RC-318	126	1976	Rosin oil	127	1286
Refrigerating machine	128	1993	Rubber scrap, powdered or granulated	133	1345
Refrigerating machines	115	8023	Rubber shoddy, powdered or granulated	133	1345
Refrigerating machines, containing Ammonia solutions (UN2073)	126	2857	Rubber solution	127	1287
Refrigerating machines, containing Ammonia solutions (UN2672)	126	2857	Rubidium	138	1423
Refrigerating machines, containing flammable, liquefied gas	115	1954	Rubidium hydroxide	154	2678
Refrigerating machines, containing flammable, non- poisonous, non-corrosive, liquefied gas	115	1954	Rubidium hydroxide, solid	154	2678
Refrigerating machines, containing non-flammable, liquefied gas	126	2857	Rubidium hydroxide, solution	154	2677
Refrigerating machines, containing non-flammable, non-poisonous, liquefied gas	126	2857	Rubidium metal	138	1423
			Seat-belt modules	171	3268
			Seat-belt pre-tensioners	171	3268
			Seed cake, with more than 1.5% oil and not more than 11% moisture	135	1386
			Seed cake, with not more than 1.5% oil and not more than 11% moisture	135	2217
			Selenates	151	2630
			Selenic acid	154	1905
			Selenites	151	2630

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Selenium compound, n.o.s.	151 3283	Self-heating solid, organic, poisonous, n.o.s.	136 312
Selenium disulfide	153 2657	Self-heating solid, organic, toxic, n.o.s.	136 312
Selenium disulphide	153 2657	Self-heating solid, oxidizing, n.o.s.	135 312
Selenium hexafluoride	125 2194	Self-heating solid, poisonous, inorganic, n.o.s.	136 319
Selenium oxide	154 2811	Self-heating solid, poisonous, organic, n.o.s.	136 312
Selenium oxychloride	157 2879	Self-heating solid, toxic, inorganic, n.o.s.	136 319
Selenium powder	152 2658	Self-heating solid, toxic, organic, n.o.s.	136 312
Self-heating liquid, corrosive, inorganic, n.o.s.	136 3188	Self-heating substance, solid, corrosive, n.o.s.	136 312
Self-heating liquid, corrosive, organic, n.o.s.	136 3185	Self-heating substances, solid, n.o.s.	135 3088
Self-heating liquid, inorganic, n.o.s.	135 3186	Self-heating substances, solid, oxidizing, n.o.s.	135 3127
Self-heating liquid, organic, n.o.s.	135 3183	Self-heating substances, solid, poisonous, n.o.s.	136 3128
Self-heating liquid, poisonous, inorganic, n.o.s.	136 3187	Self-heating substances, solid, toxic, n.o.s.	136 3128
Self-heating liquid, poisonous, organic, n.o.s.	136 3184	Self-reactive liquid type B	149 3221
Self-heating liquid, toxic, inorganic, n.o.s.	136 3187	Self-reactive liquid type B, temperature controlled	150 3231
Self-heating liquid, toxic, organic, n.o.s.	136 3184	Self-reactive liquid type C	149 3223
Self-heating metal powders, n.o.s.	135 3189	Self-reactive liquid type C, temperature controlled	150 3233
Self-heating solid, corrosive, inorganic, n.o.s.	136 3192	Self-reactive liquid type D	149 3225
Self-heating solid, corrosive, organic, n.o.s.	136 3126	Self-reactive liquid type D, temperature controlled	150 3235
Self-heating solid, inorganic, n.o.s.	135 3190	Self-reactive liquid type E	149 3227
Self-heating solid, inorganic, poisonous, n.o.s.	136 3191	Self-reactive liquid type E, temperature controlled	150 3237
Self-heating solid, inorganic, toxic, n.o.s.	136 3191	Self-reactive liquid type F	149 3229
Self-heating solid, organic, n.o.s.	135 3088		

Name of Material	Guide ID No. No.		Name of Material	Guide ID No. No.	
Self-reactive liquid type F, temperature controlled	150	3239	Sludge acid	153	1906
Self-reactive solid type B	149	3222	Smokeless powder for small arms	133	1325
Self-reactive solid type B, temperature controlled	150	3232	Smokeless powder for small arms	133	3178
Self-reactive solid type C	149	3224	Soda lime, with more than 4% Sodium hydroxide	154	1907
Self-reactive solid type C, temperature controlled	150	3234	Sodium	138	1428
Self-reactive solid type D	149	3226	Sodium aluminate, solid	154	2812
Self-reactive solid type D, temperature controlled	150	3236	Sodium aluminate, solution	154	1819
Self-reactive solid type E	149	3228	Sodium aluminum hydride	138	2835
Self-reactive solid type E, temperature controlled	150	3238	Sodium ammonium vanadate	154	2863
Self-reactive solid type F	149	3230	Sodium arsanilate	154	2473
Self-reactive solid type F, temperature controlled	150	3240	Sodium arsenate	151	1685
Self-reactive substances, samples, n.o.s.	149	3031	Sodium arsenite, aqueous solution	154	1686
Self-reactive substances, trial quantities, n.o.s.	149	3032	Sodium arsenite, solid	151	2027
Shale oil	128	1288	Sodium azide	153	1687
Silane	116	2203	Sodium bifluoride, solid	154	2439
Silicofluorides, n.o.s.	151	2856	Sodium bifluoride, solution	154	2439
Silane, compressed	116	2203	Sodium bisulfate, solid	154	1821
Silicon powder, amorphous	170	1346	Sodium bisulfate, solution	154	2837
Silicon tetrachloride	156	1818	Sodium bisulphate, solid	154	1821
Silicon tetrafluoride	125	1859	Sodium bisulphate, solution	154	2837
Silicon tetrafluoride, compressed	125	1859	Sodium borohydride	138	1426
Silver arsenite	151	1683	Sodium borohydride and Sodium hydroxide solution, with not more than 12% Sodium borohydride and not more than 40% Sodium hydroxide	157	3320
Silver cyanide	151	1684	Sodium bromate	141	1494
Silver nitrate	140	1493	Sodium cacodylate	152	1688
Silver picrate, wetted with not less than 30% water	113	1347	Sodium chlorate	140	1495
			Sodium chlorate, aqueous solution	140	2428

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Sodium chlorite	143 1496	Sodium hydride	138 1427
Sodium chlorite, solution, with more than 5% available Chlorine	154 1908	Sodium hydrogendifluoride	154 2439
Sodium chloroacetate	151 2659	Sodium hydrogen fluoride	154 2439
Sodium chromate	171 9145	Sodium hydrogen sulfate, solid	154 1821
Sodium cuprocyanide, solid	157 2316	Sodium hydrogen sulfate, solution	154 2837
Sodium cuprocyanide, solution	157 2317	Sodium hydrogen sulphate, solid	154 1821
Sodium cyanide	157 1689	Sodium hydrogen sulphate, solution	154 2837
Sodium 2-diazo-1-naphthol-4- sulfonate	149 3040	Sodium hydrosulfide, solid	154 2923
Sodium 2-diazo-1-naphthol-4- sulphonate	149 3040	Sodium hydrosulfide, solid, with less than 25% water of crystallization	135 2318
Sodium 2-diazo-1-naphthol-5- sulfonate	149 3041	Sodium hydrosulfide, solution	154 2922
Sodium 2-diazo-1-naphthol-5- sulphonate	149 3041	Sodium hydrosulfide, with less than 25% water of crystallization	135 2318
Sodium dichloroisocyanurate	141 2465	Sodium hydrosulfide, with not less than 25% water of crystallization	154 2949
Sodium dichloro-s-triazinetriene	141 2465	Sodium hydrosulfite	135 1384
Sodium dinitro-o-cresolate, wetted with not less than 15% water	113 1348	Sodium hydrosulphide, solid	154 2923
Sodium dinitro-ortho-cresolate, wetted	113 1348	Sodium hydrosulphide, solid, with less than 25% water of crystallization	135 2318
Sodium dithionite	135 1384	Sodium hydrosulphide, solution	154 2922
Sodium dodecylbenzenesulfonate (branched chain)	171 9146	Sodium hydrosulphide, with less than 25% water of crystallization	135 2318
Sodium dodecylbenzenesulphonate (branched chain)	171 9146	Sodium hydrosulphide, with not less than 25% water of crystallization	154 2949
Sodium fluoride	154 1690	Sodium hydrosulphite	135 1384
Sodium fluoride, solid	154 1690	Sodium hydroxide, dry	154 1823
Sodium fluoride, solution	154 1690	Sodium hydroxide, bead	154 1823
Sodium fluoroacetate	151 2629	Sodium hydroxide, flake	154 1823
Sodium fluorosilicate	154 2674		

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Sodium hydroxide, granular	154 1823	Sodium silicofluoride	154 2674
Sodium hydroxide, solid	154 1823	Sodium sulfide, anhydrous	135 1385
Sodium hydroxide, solution	154 1824	Sodium sulfide, hydrated, with not less than 30% water	153 1849
Sodium methylate	138 1431	Sodium sulfide, with less than 30% water of crystallization	135 1385
Sodium methylate, alcohol mixture	132 1289	Sodium sulphide, anhydrous	135 1385
Sodium methylate, dry	138 1431	Sodium sulphide, hydrated, with not less than 30% water	153 1849
Sodium methylate, solution in alcohol	132 1289	Sodium sulphide, with less than 30% water of crystallization	135 1385
Sodium monoxide	157 1825	Sodium superoxide	143 2547
Sodium nitrate	140 1498	Solids containing corrosive liquid, n.o.s.	154 3244
Sodium nitrate and Potassium nitrate mixture	140 1499	Solids containing flammable liquid, n.o.s.	133 3175
Sodium nitrite	140 1500	Solids containing poisonous liquid, n.o.s.	151 3243
Sodium nitrite and Potassium nitrate mixtures	140 1487	Solids containing toxic liquid, n.o.s.	151 3243
Sodium nitrite mixture	140 1487	Spirits of Nitroglycerin, not exceeding 1 % Nitroglycerin	127 1204
Sodium pentachlorophenate	154 2567	Stannic chloride, anhydrous	137 1827
Sodium percarbonates	140 2467	Stannic chloride, pentahydrate	154 2440
Sodium perchlorate	140 1502	Stannic phosphides	139 1433
Sodium permanganate	140 1503	Stannous chloride, solid	154 1759
Sodium peroxide	144 1504	Steel swarf	170 2793
Sodium peroxoborate, anhydrous	140 3247	Stibine	119 2676
Sodium persulfate	140 1505	Straw, wet, damp or contaminated with oil	133 1327
Sodium persulphate	140 1505	Strontium arsenite	151 1691
Sodium phenolate, solid	153 2497	Strontium chlorate	143 1506
Sodium phosphate, dibasic	171 9147	Strontium chlorate, solid	143 1506
Sodium phosphate, tribasic	171 9148	Strontium chlorate, solution	143 1506
Sodium phosphide	139 1432	Strontium chromate	171 9149
Sodium picramate, wetted with not less than 20% water	113 1349		
Sodium potassium alloys	138 1422		
Sodium selenite	151 2630		

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Strontium nitrate	140 1507	Substances, which in contact with water emit flammable gases, solid, self-heating, n.o.s.	138 313
Strontium perchlorate	140 1508	Substances, which in contact with water emit flammable gases, solid, toxic, n.o.s.	139 313
Strontium peroxide	143 1509	Substituted nitrophenol pesticide, liquid, flammable, poisonous	131 278
Strontium phosphide	139 2013	Substituted nitrophenol pesticide, liquid, flammable, toxic	131 278
Strychnine	151 1692	Substituted nitrophenol pesticide, liquid, poisonous	153 301
Strychnine salts	151 1692	Substituted nitrophenol pesticide, liquid, poisonous, flammable	131 301
Styrene monomer, inhibited	128P 2055	Substituted nitrophenol pesticide, liquid, toxic	153 301
Substances, which in contact with water emit flammable gases, liquid, corrosive, n.o.s.	138 3129	Substituted nitrophenol pesticide, liquid, toxic, flammable	131 301
Substances, which in contact with water emit flammable gases, liquid, n.o.s.	138 3148	Substituted nitrophenol pesticide, solid, poisonous	153 277
Substances, which in contact with water emit flammable gases, liquid, poisonous, n.o.s.	139 3130	Substituted nitrophenol pesticide, solid, toxic	153 277
Substances, which in contact with water emit flammable gases, liquid, toxic, n.o.s.	139 3130	Succinic acid peroxide	146 213
Substances, which in contact with water emit flammable gases, solid, corrosive, n.o.s.	138 3131	Sulfamic acid	154 296
Substances, which in contact with water emit flammable gases, solid, flammable, n.o.s.	138 3132	Sulfur	133 135
Substances, which in contact with water emit flammable gases, solid, n.o.s.	138 2813	Sulfur, molten	133 244
Substances, which in contact with water emit flammable gases, solid, oxidizing, n.o.s.	138 3133	Sulfur chlorides	137 182
Substances, which in contact with water emit flammable gases, solid, poisonous, n.o.s.	139 3134	Sulfur dioxide	125 107
		Sulfur dioxide, liquefied	125 107
		Sulfur hexafluoride	126 108
		Sulfuric acid	137 183
		Sulfuric acid, fuming	137 183

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Sulfuric acid, fuming, with less than 30% free Sulfur trioxide	137 1831	Sulphuric acid, spent	137 1832
Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide	137 1831	Sulphuric acid, with more than 51% acid	137 1830
Sulfuric acid, spent	137 1832	Sulphuric acid, with not more than 51% acid	157 2796
Sulfuric acid, with more than 51% acid	137 1830	Sulphuric acid and Hydrofluoric acid mixtures	157 1786
Sulfuric acid, with not more than 51% acid	157 2796	Sulphurous acid	154 1833
Sulfuric acid and Hydrofluoric acid mixtures	157 1786	Sulphur tetrafluoride	125 2418
Sulfurous acid	154 1833	Sulphur trioxide	137 1829
Sulfur tetrafluoride	125 2418	Sulphur trioxide, inhibited	137 1829
Sulfur trioxide	137 1829	Sulphur trioxide, stabilized	137 1829
Sulfur trioxide, inhibited	137 1829	Sulphur trioxide, uninhibited	137 1829
Sulfur trioxide, stabilized	137 1829	Sulphur trioxide and Chlorosulphonic acid mixture	137 1754
Sulfur trioxide, uninhibited	137 1829	Sulphuryl chloride	137 1834
Sulfur trioxide and Chlorosulphonic acid mixture	137 1754	Sulphuryl fluoride	123 2191
Sulphuryl chloride	137 1834	Tars, liquid	130 1999
Sulphuryl fluoride	123 2191	TDE (1,1-Dichloro-2,2-bis (p-chlorophenyl)ethane)	151 2761
Sulphamic acid	154 2967	Tear gas grenades	159 1700
Sulphur	133 1350	Tear gas devices	159 1693
Sulphur, molten	133 2448	Tear gas substance, liquid, n.o.s.	159 1693
Sulphur chlorides	137 1828	Tear gas substance, solid, n.o.s.	159 1693
Sulphur dioxide	125 1079	Tellurium compound, n.o.s.	151 3284
Sulphur dioxide, liquefied	125 1079	Tellurium hexafluoride	125 2195
Sulphur hexafluoride	126 1080	Terpene hydrocarbons, n.o.s.	128 2319
Sulphuric acid	137 1830	Terpinolene	128 2541
Sulphuric acid, fuming	137 1831	Tetrabromoethane	159 2504
Sulphuric acid, fuming, with less than 30% free Sulphur trioxide	137 1831	1,1,2,2-Tetrachloroethane	151 1702
Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide	137 1831	Tetrachloroethane	151 1702
		Tetrachloroethylene	160 1897
		Tetraethyl dithiopyrophosphate	153 1704

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Tetraethyl dithiopyrophosphate, mixture, dry or liquid	153 1704	Tetrafluoromethane, compressed	126 19
Tetraethyl dithiopyrophosphate and gases, in solution	123 1703	1,2,3,6-Tetrahydro-benzaldehyde	132 24
Tetraethyl dithiopyrophosphate and gases, mixtures	123 1703	Tetrahydrofuran	127 20
Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	123 1703	Tetrahydrofurfurylamine	129 29
Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	123 1703	Tetrahydrophthalic anhydrides	156 26
Tetraethylenepentamine	153 2320	1,2,3,6-Tetrahydropyridine	129 24
Tetraethyl lead, liquid	131 1649	1,2,5,6-Tetrahydropyridine	129 24
Tetraethyl pyrophosphate, liquid	152 2783	Tetrahydrothiophene	129 24
Tetraethyl pyrophosphate, liquid	152 3018	Tetralin hydroperoxide	145 213
Tetraethyl pyrophosphate, solid	152 2783	Tetramethylammonium hydroxide	153 183
Tetraethyl pyrophosphate and compressed gas mixtures	123 1705	1,1,3,3-Tetramethylbutyl hydroperoxide	145 216
Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	123 1705	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate	148 216
Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	123 1705	Tetramethylmethylenediamine	132 906
Tetraethyl pyrophosphate mixture, dry	152 2783	Tetramethylsilane	130 274
Tetraethyl silicate	132 1292	Tetranitromethane	143 151
1,1,1,2-Tetrafluoroethane	126 3159	Tetrapropyl orthotitanate	128 241
Tetrafluoroethane and Ethylene oxide mixture, with not more than 5.6% Ethylene oxide	126 3299	Textile treating compound or mixture, liquid (corrosive)	154 176
Tetrafluoroethylene, inhibited	116P 1081	Thallium chlorate	141 257
Tetrafluoromethane	126 1982	Thallium compound, n.o.s.	151 170
		Thallium nitrate	141 272
		Thallium sulfate, solid	151 170
		Thallium sulphate, solid	151 170
		4-Thiapentanal	152 278
		Thia-4-pentanal	152 278
		Thioacetic acid	129 243
		Thioglycol	153 296
		Thioglycolic acid	153 194
		Thiolactic acid	153 293

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Ammonium chloride	137 1836	Toluene diisocyanate	156 2078
Aniline	130 2414	Toluene sulfonic acid, liquid, with more than 5% free Sulfuric acid	153 2584
Antimony phosphine	157 2474	Toluene sulfonic acid, liquid, with not more than 5% free Sulfuric acid	153 2586
Antimony phosphoryl chloride	157 1837	Toluene sulfonic acid, solid, with more than 5% free Sulfuric acid	153 2583
Antimony	151 2771	Toluene sulfonic acid, solid, with not more than 5% free Sulfuric acid	153 2585
Antimony metal, pyrophoric	162 2975	Toluene sulphonic acid, liquid, with more than 5% free Sulphuric acid	153 2584
Antimony nitrate, solid	162 2976	Toluene sulphonic acid, liquid, with not more than 5% free Sulphuric acid	153 2586
Antiseptics, medicinal	127 1293	Toluene sulphonic acid, solid, with more than 5% free Sulphuric acid	153 2583
Antimony tetrachloride	137 1827	Toluene sulphonic acid, solid, with not more than 5% free Sulphuric acid	153 2585
Antimony tetrachloride, pentahydrate	154 2440	Toluidines	153 1708
Antimony disulfide	135 3174	Toluidines, liquid	153 1708
Antimony disulphide	135 3174	Toluidines, solid	153 1708
Antimony hydride	170 1871	2,4-Toluylenediamine	151 1709
Antimony powder, dry	135 2546	Toxaphene	151 2761
Antimony powder, wetted with not less than 25% water	170 1352	Toxic liquid, corrosive, inorganic, n.o.s.	154 3289
Antimony sponge granules	170 2878	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)	154 3289
Antimony sponge powders	170 2878	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	154 3289
Antimony sulfate, solution	154 1760		
Antimony sulphate, solution	154 1760		
Antimony tetrachloride	137 1838		
Antimony tetrachloride and Vanadium oxytrichloride, mixture	137 2443		
Antimony trichloride, pyrophoric	135 2441		
Antimony trichloride mixture	157 2869		
Antimony trichloride mixture, pyrophoric	135 2441		
Antimony trichloride, wetted with not less than 30% water	113 1356		
Antimony puffs, nitrocellulose base	133 1353		
Antimony	130 1294		
2,4-Toluenediamine	151 1709		
Toluenediamine	151 1709		

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Toxic liquid, corrosive, organic, n.o.s.	154 2927	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)	142 312
Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)	154 2927	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	142 312
Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	154 2927	Toxic liquid, water-reactive, n.o.s.	139 312
Toxic liquid, flammable, n.o.s.	131 2929	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)	139 312
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)	131 2929	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	139 312
Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	131 2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s.	139 312
Toxic liquid, flammable, organic, n.o.s.	131 2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)	139 312
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)	131 2929	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	139 312
Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	131 2929	Toxic solid, corrosive, inorganic, n.o.s.	154 329
Toxic liquid, inorganic, n.o.s.	151 3287	Toxic solid, corrosive, organic, n.o.s.	154 292
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)	151 3287	Toxic solid, flammable, n.o.s.	134 293
Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	151 3287	Toxic solid, flammable, organic, n.o.s.	134 293
Toxic liquid, n.o.s.	153 2810	Toxic solid, inorganic, n.o.s.	151 328
Toxic liquid, n.o.s. (Inhalation Hazard Zone A)	153 2810	Toxic solid, n.o.s.	154 281
Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	153 2810	Toxic solid, organic, n.o.s.	154 281
Toxic liquid, organic, n.o.s.	153 2810	Toxic solid, oxidizing, n.o.s.	141 308
Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)	153 2810	Toxic solid, self-heating, n.o.s.	136 312
Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	153 2810	Toxic solid, water-reactive, n.o.s.	139 312
Toxic liquid, oxidizing, n.o.s.	142 3122		

Name of Material	Guide ID		Name of Material	Guide ID	
	No.	No.		No.	No.
toxic solid, which in contact with water emits flammable gases, n.o.s.	139	3125	Trichlorophenol	153	2020
toxins, extracted from living sources, n.o.s.	153	3172	2,4,5-Trichlorophenoxyacetic acid	152	2765
triallylamine	132	2610	2,4,5-Trichlorophenoxypropionic acid	152	2765
triallyl borate	156	2609	Trichlorosilane	139	1295
triazine pesticide, liquid, flammable, poisonous	131	2764	Trichloro-s-triazinetriene, dry	141	2468
triazine pesticide, liquid, flammable, toxic	131	2764	(mono)-(Trichloro)-tetra-(monopotassium dichloro)-penta-s-triazinetriene, dry	141	2468
triazine pesticide, liquid, poisonous	151	2998	Tricresyl phosphate	151	2574
triazine pesticide, liquid, poisonous, flammable	131	2997	Triethanolamine dodecylbenzenesulfonate	171	9151
triazine pesticide, liquid, toxic	151	2998	Triethanolamine dodecylbenzenesulphonate	171	9151
triazine pesticide, liquid, toxic, flammable	131	2997	Triethylamine	132	1296
triazine pesticide, solid, poisonous	151	2763	Triethylenetetramine	153	2259
tri-(1-aziridinyl)phosphine oxide, solution	152	2501	Triethyl phosphite	129	2323
tributylamine	153	2542	Trifluoroacetic acid	154	2699
tributylphosphane	135	3254	Trifluoroacetyl chloride	125	3057
tributylphosphine	135	3254	Trifluorochloroethylene	119P	1082
trichlorfon	152	2783	Trifluorochloroethylene, inhibited	119P	1082
trichloroacetic acid	153	1839	1,1,1-Trifluoroethane	115	2035
trichloroacetic acid, solution	153	2564	Trifluoroethane, compressed	115	2035
trichloroacetyl chloride	156	2442	Trifluoromethane	126	1984
trichlorobenzenes, liquid	153	2321	Trifluoromethane, refrigerated liquid	120	3136
trichlorobutene	152	2322	Trifluoromethane and Chlorotrifluoromethane azeotropic mixture with approximately 60% Chlorotrifluoromethane	126	2599
1,1,1-Trichloroethane	160	2831	2-Trifluoromethylaniline	153	2942
trichloroethylene	160	1710	3-Trifluoromethylaniline	153	2948
trichloroisocyanuric acid, dry	141	2468	Triisobutylene	128	2324

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Triisocyanatoisocyanurate of Isophoronediiisocyanate, solution (70%)	127 2906	Uranium hexafluoride, fissile containing more than 1% Uranium-235	166 29
Triisopropyl borate	129 2616	Uranium hexafluoride, fissile excepted	166 29
Trimethoxysilane	132 9269	Uranium hexafluoride, low specific activity	166 29
Trimethylacetyl chloride	132 2438	Uranium hexafluoride, non- fissile	166 29
Trimethylamine, anhydrous	118 1083	Uranium metal, pyrophoric	162 29
Trimethylamine, aqueous solution	132 1297	Uranyl acetate	162 918
1,3,5-Trimethylbenzene	129 2325	Uranyl nitrate, hexahydrate, solution	162 298
Trimethyl borate	129 2416	Uranyl nitrate, solid	162 298
Trimethylchlorosilane	155 1298	Urea hydrogen peroxide	140 151
Trimethylcyclohexylamine	153 2326	Urea nitrate, wetted with not less than 20% water	113 135
Trimethylhexamethylenediamines	153 2327	Urea peroxide	140 151
Trimethylhexamethylene diisocyanate	156 2328	Valeraldehyde	129 205
Trimethyl phosphite	129 2329	Valeryl chloride	132 250
Trinitroaniline, wetted	113 9073	Vanadium compound, n.o.s.	151 328
Trinitrobenzene, wetted with not less than 30% water	113 1354	Vanadium oxytrichloride	137 244
Trinitrobenzoic acid, wetted with not less than 30% water	113 1355	Vanadium oxytrichloride and Titanium tetrachloride, mixture	137 244
Trinitrophenol, wetted with not less than 30% water	113 1344	Vanadium pentoxide	151 286
Trinitrotoluene, wetted with not less than 30% water	113 1356	Vanadium tetrachloride	137 244
Tripropylamine	132 2260	Vanadium trichloride	157 247
Tripropylene	128 2057	Vanadium trioxide	154 286
Tris-(1-aziridinyl)phosphine oxide, solution	152 2501	Vanadyl sulfate	151 293
Tungsten hexafluoride	125 2196	Vanadyl sulphate	151 293
Turpentine	128 1299	Vinyl acetate	129P 130
Turpentine substitute	128 1300	Vinyl acetate, inhibited	129P 130
Undecane	128 2330	Vinyl bromide, inhibited	116P 108
		Vinyl butyrate, inhibited	129P 283

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
vinyl chloride	116P 1086	Waste Type 18	154 9318
vinyl chloride, inhibited	116P 1086	Waste Type 19	154 9319
vinyl chloride, stabilized	116P 1086	Waste Type 20	154 9320
vinyl chloroacetate	155 2589	Waste Type 21	154 9321
vinyl ethyl ether	127P 1302	Waste Type 22	154 9322
vinyl ethyl ether, inhibited	127P 1302	Waste Type 23	154 9323
vinyl fluoride, inhibited	116P 1860	Waste Type 24	152 9324
vinylidene chloride, inhibited	129P 1303	Waste Type 25	127 9325
vinyl isobutyl ether	127P 1304	Waste Type 26	152 9326
vinyl isobutyl ether, inhibited	127P 1304	Waste Type 27	131 9327
vinyl methyl ether	116P 1087	Waste Type 28	131 9328
vinyl methyl ether, inhibited	116P 1087	Waste Type 29	153 9329
vinylpyridines, inhibited	131P 3073	Waste Type 30	153 9330
vinyltoluene, inhibited	130P 2618	Waste Type 31	129 9331
vinyltrichlorosilane	155 1305	Waste Type 32	129 9332
vinyltrichlorosilane, inhibited	155 1305	Waste Type 33	129 9333
Waste Type 1	153 9301	Waste Type 34	129 9334
Waste Type 2	153 9302	Waste Type 35	153 9335
Waste Type 3	131 9303	Waste Type 36	153 9336
Waste Type 4	153 9304	Waste Type 37	153 9337
Waste Type 5	131 9305	Waste Type 38	153 9338
Waste Type 6	154 9306	Waste Type 39	153 9339
Waste Type 7	154 9307	Waste Type 40	153 9340
Waste Type 8	153 9308	Waste Type 41	132 9341
Waste Type 9	153 9309	Waste Type 42	129 9342
Waste Type 10	153 9310	Waste Type 43	154 9343
Waste Type 11	153 9311	Waste Type 44	132 9344
Waste Type 12	153 9312	Waste Type 45	132 9345
Waste Type 13	153 9313	Waste Type 46	153 9346
Waste Type 14	153 9314	Waste Type 47	132 9347
Waste Type 15	153 9315	Waste Type 48	153 9348
Waste Type 16	154 9316	Waste Type 49	153 9349
Waste Type 17	154 9317	Waste Type 50	153 9350

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Waste Type 51	153 9351	Waste Type 84	151 938
Waste Type 52	153 9352	Waste Type 85	154 938
Waste Type 53	153 9353	Waste Type 86	154 938
Waste Type 54	153 9354	Waste Type 87	154 938
Waste Type 55	153 9355	Waste Type 88	151 938
Waste Type 56	153 9356	Waste Type 89	154 938
Waste Type 57	153 9357	Waste Type 90	154 939
Waste Type 58	153 9358	Waste Type 91	153 939
Waste Type 59	151 9359	Waste Type 92	154 939
Waste Type 60	132 9360	Waste Type 93	153 939
Waste Type 61	151 9361	Waste Type 94	151 939
Waste Type 62	151 9362	Waste Type 95	153 939
Waste Type 63	151 9363	Waste Type 96	151 939
Waste Type 64	151 9364	Waste Type 97	153 939
Waste Type 65	151 9365	Waste Type 99	137 939
Waste Type 66	151 9366	Waste Type 100	137 940
Waste Type 67	152 9367	Water pump system	126 1950
Waste Type 68	154 9368	Water-reactive liquid, corrosive, n.o.s.	138 3129
Waste Type 69	151 9369	Water-reactive liquid, n.o.s.	138 3148
Waste Type 70	151 9370	Water-reactive liquid, poisonous, n.o.s.	139 3130
Waste Type 71	133 9371	Water-reactive liquid, toxic, n.o.s.	139 3130
Waste Type 72	151 9372	Water-reactive solid, corrosive, n.o.s.	138 3131
Waste Type 73	151 9373	Water-reactive solid, flammable, n.o.s.	138 3132
Waste Type 74	127 9374	Water-reactive solid, n.o.s.	138 2813
Waste Type 75	153 9375	Water-reactive solid, oxidizing, n.o.s.	138 3133
Waste Type 76	153 9376	Water-reactive solid, poisonous, n.o.s.	139 3134
Waste Type 77	131 9377	Water-reactive solid, self- heating, n.o.s.	138 3135
Waste Type 78	153 9378		
Waste Type 79	153 9379		
Waste Type 80	151 9380		
Waste Type 81	154 9381		
Waste Type 82	154 9382		
Waste Type 83	154 9383		

Name of Material	Guide ID		Name of Material	Guide ID	
	No.	No.		No.	No.
Water-reactive solid, toxic, n.o.s.	139	3134	Xylenes	130	1307
Water-reactive substances, liquid, corrosive, n.o.s.	138	3129	Xylenols	153	2261
Water-reactive substances, liquid, n.o.s.	138	3148	Xylidines	153	1711
Water-reactive substances, liquid, poisonous, n.o.s.	139	3130	Xylyl bromide	152	1701
Water-reactive substances, liquid, toxic, n.o.s.	139	3130	Yellow phosphorus, dry	136	1381
Water-reactive substances, solid, corrosive, n.o.s.	138	3131	Yellow phosphorus, in solution	136	1381
Water-reactive substances, solid, flammable, n.o.s.	138	3132	Yellow phosphorus, molten	136	2447
Water-reactive substances, solid, n.o.s.	138	2813	Yellow phosphorus, under water	136	1381
Water-reactive substances, solid, oxidizing, n.o.s.	138	3133	Zinc acetate	171	9153
Water-reactive substances, solid, poisonous, n.o.s.	139	3134	Zinc ammonium chloride	171	9154
Water-reactive substances, solid, self-heating, n.o.s.	138	3135	Zinc ammonium nitrite	140	1512
Wheelchair, electric, with batteries	154	3171	Zinc arsenate	151	1712
White asbestos	171	2590	Zinc arsenate and Zinc arsenite mixture	151	1712
White phosphorus, dry	136	1381	Zinc arsenite	151	1712
White phosphorus, in solution	136	1381	Zinc arsenite and Zinc arsenate mixture	151	1712
White phosphorus, molten	136	2447	Zinc ashes	138	1435
White phosphorus, under water	136	1381	Zinc bisulfite solution	154	2693
Wood preservatives, liquid	129	1306	Zinc bisulphite solution	154	2693
Wool waste, wet	133	—	Zinc borate	171	9155
Zenon	121	2036	Zinc bromate	140	2469
Zenon, compressed	121	2036	Zinc bromide	171	9156
Zenon, refrigerated liquid (cryogenic liquid)	120	2591	Zinc carbonate	171	9157
			Zinc chlorate	140	1513
			Zinc chloride, anhydrous	154	2331
			Zinc chloride, solution	154	1840
			Zinc cyanide	151	1713
			Zinc dithionite	171	1931
			Zinc dross	138	1435
			Zinc dust	138	1436
			Zinc fluoride	151	9158
			Zinc fluorosilicate	151	2855

Name of Material	Guide ID No. No.	Name of Material	Guide ID No. No.
Zinc formate	171 9159	Zirconium sulfate	171 916
Zinc hydrosulfite	171 1931	Zirconium sulphate	171 916
Zinc hydrosulphite	171 1931	Zirconium suspended in a flammable liquid	170 130
Zinc nitrate	140 1514	Zirconium suspended in a liquid (flammable)	170 130
Zinc permanganate	140 1515	Zirconium tetrachloride	137 250
Zinc peroxide	143 1516		
Zinc phenolsulfonate	171 9160		
Zinc phenolsulphonate	171 9160		
Zinc phosphide	139 1714		
Zinc powder	138 1436		
Zinc residue	138 1435		
Zinc resinate	133 2714		
Zinc selenate	151 2630		
Zinc selenite	151 2630		
Zinc silicofluoride	151 2855		
Zinc skimmings	138 1435		
Zinc sulfate	171 9161		
Zinc sulphate	171 9161		
Zirconium, dry, coiled wire, finished metal sheets or strips	170 2858		
Zirconium, dry, finished sheets, strips or coiled wire	135 2009		
Zirconium hydride	138 1437		
Zirconium metal, liquid, suspension	170 1308		
Zirconium metal, powder, wet	170 1358		
Zirconium nitrate	140 2728		
Zirconium picramate, wetted with not less than 20% water	113 1517		
Zirconium potassium fluoride	171 9162		
Zirconium powder, dry	135 2008		
Zirconium powder, wetted with not less than 25% water	170 1358		
Zirconium scrap	135 1932		

GUIDES

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May explode from heat, shock, friction or contamination.
- May react violently or explosively on contact with air, water or foam.
- May be ignited by heat, sparks or flames.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Inhalation, ingestion or contact with substance may cause severe injury, infection, disease or death.
- High concentration of gas may cause asphyxiation without warning.
- Contact may cause burns to skin and eyes.
- Fire or contact with water may produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CAUTION: Material may react with extinguishing agent.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills • Dike far ahead of liquid spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Shower and wash with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- MAY EXPLODE AND THROW FRAGMENTS 1600 meters (1 MILE) OR MORE IF FIRE REACHES CARGO.
- For information on "Compatibility Group" letters, refer to Glossary section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 500 meters (1/3 mile) in all directions.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire

- If rail car or trailer is involved in a fire and heavily encased explosives such as bombs or artillery projectiles are suspected, ISOLATE for 1600 m (1 mile) in all directions; also, initiate evacuation including emergency responders for 1600 m (1 mile) in all directions.
- When heavily encased explosives are not involved, evacuate the area for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****CARGO Fires**

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 1600 meters (1 mile) in all directions and let burn.
- Do not move cargo or vehicle if cargo has been exposed to heat.

TIRE or VEHICLE Fires

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- **DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.**
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May be ignited by heat, sparks or flames.
- **DRIED OUT material may explode if exposed to heat, flame, friction or shock; Treat as an explosive (GUIDE 112).**
- **Keep material wet with water or treat as an explosive (Guide 112).**
- Runoff to sewer may create fire or explosion hazard.

HEALTH

- Some are toxic and may be fatal if inhaled, swallowed or absorbed through skin.
- Contact may cause burns to skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- **Consider initial evacuation for 500 meters (1/3 mile) in all directions.**

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****CARGO Fires**

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 800 meters (1/2 mile) in all directions and let burn.
- **Do not move cargo or vehicle if cargo has been exposed to heat.**

TIRE or VEHICLE Fires

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.

Small Spills

- Flush area with flooding quantities of water.

Large Spills

- Wet down with water and dike for later disposal.
- **KEEP "WETTED" PRODUCT WET BY SLOWLY ADDING FLOODING QUANTITIES OF WATER.**

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- MAY EXPLODE AND THROW FRAGMENTS 500 meters (1/3 MILE) OR MORE IF FIRE REACHES CARGO.
- For information on "Compatibility Group" letters, refer to Glossary section.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Move people out of line of sight of the scene and away from windows.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for 250 meters (800 feet) in all directions.

Fire

- If rail car or trailer is involved in a fire, ISOLATE for 500 meters (1/3 mile) in all directions; also initiate evacuation including emergency responders for 500 meters (1/3 mile) in all directions.

EMERGENCY RESPONSE**FIRE****CARGO Fires**

- **DO NOT fight fire when fire reaches cargo! Cargo may EXPLODE!**
- Stop all traffic and clear the area for at least 500 meters (1/3 mile) in all directions and let burn.
- **Do not move cargo or vehicle if cargo has been exposed to heat.**

TIRE or VEHICLE Fires

- **Use plenty of water - FLOOD it! If water is not available, use CO₂, dry chemical or dirt.**
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- **DO NOT OPERATE RADIO TRANSMITTERS WITHIN 100 meters (330 feet) OF ELECTRIC DETONATORS.**
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SUPPLEMENTAL INFORMATION

- Packages bearing the 1.4S label contain explosive substances or articles that are designed or packaged in such a manner that when involved in a fire, may burn vigorously with localized detonations and projection of fragments.
- Effects are usually confined to immediate vicinity of packages.
- If fire threatens cargo area containing packages bearing the 1.4S label, consider initial isolation of at least 15 meters (50 feet) in all directions. Fight fire with normal precautions from a reasonable distance.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE.**
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be irritating if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray or fog.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE.**
- Will be easily ignited by heat, sparks or flames.
- Will form explosive mixtures with air.
- Silane will ignite spontaneously in air.
- Some may polymerize (**P**) explosively when heated or involved in a fire.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Some may be toxic if inhaled at high concentrations.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Stop leak if you can do it without risk.
- Do not touch or walk through spilled material.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **TOXIC; Extremely Hazardous.**
- May be fatal if inhaled or absorbed through skin.
- Initial odor may be irritating or foul and may deaden your sense of smell.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- These materials are extremely flammable.
- May form explosive mixtures with air.
- May be ignited by heat, sparks or flames.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Consider igniting spill or leak to eliminate toxic gas concerns.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE.**
- May be ignited by heat, sparks or flames.
- May form explosive mixtures with air.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- May cause toxic effects if inhaled.
- Vapors are extremely irritating.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 800 meters (1/2 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **TOXIC**; may be fatal if inhaled or absorbed through skin.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Flammable; may be ignited by heat, sparks or flames.
- May form explosive mixtures with air.
- Some may polymerize (**P**) explosively when heated or involved in a fire.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.
- Runoff may create fire or explosion hazard.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, **ISOLATE** for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER;** use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- **FOR CHLOROSILANES,** use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.

FIRE OR EXPLOSION

- **Non-flammable gases.**
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 meters (80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids or solids.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with liquefied gas may cause frostbite.

FIRE OR EXPLOSION

- **Non-flammable gases.**
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- Some may react explosively with fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Runoff may create fire or explosion hazard.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 500 meters (1/3 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Use extinguishing agent suitable for type of surrounding fire.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Isolate area until gas has dispersed.

CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Clothing frozen to the skin should be thawed before being removed.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **TOXIC**; may be fatal if inhaled or absorbed through skin.
- Vapors may be irritating.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Some may burn, but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; may be fatal if inhaled or absorbed through skin.
- Fire will produce irritating, corrosive and/or toxic gases.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- These are strong oxidizers and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Some will react violently with air, moist air and/or water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires: Water only; no dry chemical, CO₂ or Halon®.

- Contain fire and let burn. If fire must be fought, water spray or fog is recommended.
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled.**
- Vapors are extremely irritating and corrosive.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Some may burn, but none ignite readily.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Some of these materials may react violently with water.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Do not get water inside containers.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Some may burn, but none ignite readily.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH

- Vapors may cause dizziness or asphyxiation without warning.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire may produce irritating, corrosive and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 500 meters (1/3 mile).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- Use extinguishing agent suitable for type of surrounding fire.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged cylinders should be handled only by specialists.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- Some of these materials, if spilled, may evaporate leaving a flammable residue.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Do not direct water at spill or source of leak.
- Use water spray to reduce vapors or divert vapor cloud drift.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Allow substance to evaporate.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Some may polymerize (**P**) explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL** Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Some may polymerize (P) explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.
- Substance may be transported hot.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Some may polymerize **(P)** explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or absorbed through skin.
- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

- Do not use dry chemical extinguishers to control fires involving nitromethane or nitroethane.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Some may polymerize **(P)** explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or absorbed through skin.
- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- **Do not use straight streams.**
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; may be fatal if inhaled, ingested or absorbed through skin.
- Inhalation or contact with some of these materials will irritate or burn skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE**: Will be easily ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Some may polymerize **(P)** explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

PUBLIC SAFETY

- **CALL** Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.

Small Spills • Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible materials.
- May be ignited by heat, sparks or flames.
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Some may polymerize (**P**) explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

HEALTH

- May cause toxic effects if inhaled or ingested/swallowed.
- Contact with substance may cause severe burns to skin and eyes.
- Fire will produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or suffocation.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION**Large Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Some of these materials may react violently with water.

Small Fires • Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Do not get water inside containers.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb with earth, sand or other non-combustible material and transfer to containers (except for Hydrazine).
- Use clean non-sparking tools to collect absorbed material.

Large Spills • Dike far ahead of liquid spill for later disposal.

- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May be ignited by friction, heat, sparks or flames.
- Some may burn rapidly with flare burning effect.
- Powders, dusts, shavings, borings, turnings or cuttings may explode or burn with explosive violence.
- Substance may be transported in a molten form.
- May re-ignite after fire is extinguished.

HEALTH

- Fire may produce irritating and/or toxic gases.
- Contact may cause burns to skin and eyes.
- Contact with molten substance may cause severe burns to skin and eyes.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL** Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂, sand, earth, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Cool containers with flooding quantities of water until well after fire is out.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Removal of solidified molten material from skin requires medical assistance.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Flammable/combustible material.
- May be ignited by heat, sparks or flames.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.

HEALTH

- TOXIC; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Do not use straight streams.
- Do not get water inside containers.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Prevent entry into waterways, sewers, basements or confined areas.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Flammable/combustible material.
- May ignite on contact with air or moist air.
- May burn rapidly with flare-burning effect.
- Some react vigorously or explosively on contact with water.
- Some may decompose explosively when heated or involved in a fire.
- May re-ignite after fire is extinguished.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire will produce irritating, corrosive and/or toxic gases.
- Inhalation of decomposition products may cause severe injury or death.
- Contact with substance may cause severe burns to skin and eyes.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- DO NOT USE WATER, CO₂ OR FOAM ON MATERIAL ITSELF.
- Some of these materials may react violently with water.

Small Fires

- Dry chemical, soda ash, lime or DRY sand.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.

CAUTION: Dithionite (Hydrosulfite/Hydrosulphite) fires may require flooding with water in order to eliminate hazardous reaction since the materials generate their own oxygen.

- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers or in contact with substance.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leak with no fire.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Extremely flammable; will ignite itself if exposed to air.
- Burns rapidly, releasing dense, white, irritating fumes.
- Substance may be transported in a molten form.
- May re-ignite after fire is extinguished.

HEALTH

- Fire will produce irritating, corrosive and/or toxic gases.
- TOXIC; ingestion of substance or inhalation of decomposition products will cause severe injury or death.
- Contact with substance may cause severe burns to skin and eyes.
- Some effects may be experienced due to skin absorption.
- Runoff from fire control may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Water spray, wet sand or wet earth.

Large Fires

- Water spray or fog.
- **Do not scatter spilled material with high pressure water streams.**
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.

Small Spills

- Cover with water, sand or earth. Shovel into metal container and keep material under water.

Large Spills

- Dike for later disposal and cover with wet sand or earth.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, keep exposed skin areas immersed in water or covered with wet bandages until medical attention is received.
- Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes at the site and place in metal container filled with water. Fire hazard if allowed to dry.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Contact with molten substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Flammable/toxic gases may accumulate in confined areas (basement, tanks, hopper/tank cars etc.).
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- When material is not involved in fire: do not use water on material itself.

Small Fires

- Dry chemical or CO₂.
- Move containers from fire area if you can do it without risk.

Large Fires

- Flood fire area with large quantities of water, while knocking down vapors with water fog. If insufficient water supply: knock down vapors only.

Fire involving Tanks or Car/Trailer Loads

- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Removal of solidified molten material from skin requires medical assistance.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Produce flammable gases on contact with water.
- May ignite on contact with water or moist air.
- Some react vigorously or explosively on contact with water.
- May be ignited by heat, sparks or flames.
- May re-ignite after fire is extinguished.
- Some are transported in highly flammable liquids.
- Runoff may create fire or explosion hazard.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce corrosive solutions on contact with water.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate the area before entry.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT USE WATER OR FOAM.**

Small Fires

- Dry chemical, soda ash, lime or sand.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- Move containers from fire area if you can do it without risk.

Magnesium Fires • DRY sand, sodium chloride powder, graphite powder or Met-L-X® powder.

Lithium Fires

- DRY sand, sodium chloride powder, graphite powder, copper powder or Lith-X® powder.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- **DO NOT GET WATER on spilled substance or inside containers.**

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Dike for later disposal; do not apply water unless directed to do so.

Powder Spills • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Produce flammable and toxic gases on contact with water.
- May ignite on contact with water or moist air.
- Some react vigorously or explosively on contact with water.
- May be ignited by heat, sparks or flames.
- May re-ignite after fire is extinguished.
- Some are transported in highly flammable liquids.
- Runoff may create fire or explosion hazard.

HEALTH

- Highly toxic: contact with water produces toxic gas, may be fatal if inhaled.
- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce corrosive solutions on contact with water.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 150 meters (330 to 490 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate the area before entry.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Large Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT USE WATER OR FOAM.**

Small Fires

- Dry chemical, soda ash, lime or sand.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam; **DO NOT USE** dry chemicals, soda ash or lime on chlorosilane fires as they may release large quantities of hydrogen gas which may explode.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Dike for later disposal; do not apply water unless directed to do so.

Powder Spills • Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- These substances will accelerate burning when involved in a fire.
- Some may decompose explosively when heated or involved in a fire.
- May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns, or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Do not use dry chemicals, CO₂, Halon® or foams. Use water only.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Do not get water inside containers.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Liquid Spills

- Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- **Following product recovery, flush area with water.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- These substances will accelerate burning when involved in a fire.
- May explode from heat or contamination.
- Some may burn rapidly.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Toxic by ingestion.
- Inhalation of dust is toxic.
- Fire may produce irritating, corrosive and/or toxic gases.
- Contact with substance may cause severe burns to skin and eyes.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Do not use dry chemicals, CO₂, Halon® or foams. Use water only.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Large Spills

- Dike far ahead of spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- These substances will accelerate burning when involved in a fire.
- May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Toxic/flammable fumes may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Do not use dry chemicals, CO₂, Halon® or foams. Use water only.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not get water inside containers.

Small Liquid Spills

- Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May explode from friction, heat or contamination.
- These substances will accelerate burning when involved in a fire.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Some will react explosively with hydrocarbons (fuels).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Fire may produce irritating and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Do not use dry chemicals, CO₂, Halon® or foams. Use water only.

Large Fires

- Flood fire area with water from a distance.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Move containers from fire area if you can do it without risk.
- Do not get water inside containers: a violent reaction may occur.
- Cool containers with flooding quantities of water until well after fire is out.
- Dike fire-control water for later disposal.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills

- Flush area with flooding quantities of water.

Large Spills

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May ignite combustibles (wood, paper, oil, clothing, etc.).
- React vigorously and/or explosively with water.
- Produce toxic and/or corrosive substances on contact with water.
- Flammable/toxic gases may accumulate in tanks and hopper cars.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation or contact with vapor, substance, or decomposition products may cause severe injury or death.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT USE WATER OR FOAM.**

Small Fires

- Dry chemical, soda ash or lime.

Large Fires

- DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- **DO NOT GET WATER on spilled substance or inside containers.**

Small Spills

- Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

Large Spills

- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May explode from heat or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- May explode from heat, shock, friction or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat or contamination.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Contact of vapor or substance with eyes may cause blindness within minutes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Toxic fumes or dust may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Keep substance wet using water spray.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Wet down with water and dike for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May explode from heat, contamination or loss of temperature control.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- May ignite spontaneously if exposed to air.
- May be ignited by heat, sparks or flames.
- May burn rapidly with flare-burning effect.
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Fire may produce irritating, corrosive and/or toxic gases.
- Ingestion or contact (skin, eyes) with substance may cause severe injury or burns.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- **DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.**

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.
- **The temperature of the substance must be maintained at or below the "Control Temperature" at all times.**
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- **BEWARE OF POSSIBLE CONTAINER EXPLOSION.**
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Remove material from skin immediately.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.
- May be ignited by heat, sparks or flames.
- Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- Vapors or dust may form explosive mixtures with air.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads**• BEWARE OF POSSIBLE CONTAINER EXPLOSION.**

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- **Self-decomposition or self-ignition may be triggered by heat, chemical reaction, friction or impact.**
- Self-accelerating decomposition may occur if the specific control temperature is not maintained.
- These materials are particularly sensitive to temperature rises. Above a given "Control Temperature" they decompose violently and catch fire.
- May be ignited by heat, sparks or flames.
- Some may decompose explosively when heated or involved in a fire.
- May burn violently. Decomposition may be self-accelerating and produce large amounts of gases.
- Vapors or dust may form explosive mixtures with air.

HEALTH

- Inhalation or contact with vapors, substance, or decomposition products may cause severe injury or death.
- May produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- **DO NOT allow the substance to warm up. Obtain liquid nitrogen, dry ice or ice for cooling. If none can be obtained, evacuate the area immediately.**

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 250 meters (800 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Flood fire area with water from a distance.
- **The temperature of the substance must be maintained at or below the "Control Temperature" at all times.**
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- **BEWARE OF POSSIBLE CONTAINER EXPLOSION.**
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- **ALWAYS** stay away from the ends of tanks.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.

Small Spills

- Take up with inert, damp, noncombustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **Highly toxic**, may be fatal if inhaled, swallowed or absorbed through skin.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Containers may explode when heated.
- Runoff may pollute waterways.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **Highly toxic**, may be fatal if inhaled, swallowed or absorbed through skin.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- Containers may explode when heated.
- Runoff may pollute waterways.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.
- Do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Cover with plastic sheet to prevent spreading.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **TOXIC**; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Some may polymerize (**P**) explosively when heated or involved in a fire.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.
- Runoff may pollute waterways.
- Substance may be transported in a molten form.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- **TOXIC**; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, **ISOLATE** for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- Vapors form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapors may travel to source of ignition and flash back.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

HEALTH

- **TOXIC;** inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- **Bromoacetates and chloroacetates are extremely irritating/lachrymators.**
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂, dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER**; use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Do not use straight streams.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- Combustible material: may burn but does not ignite readily.
- Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff.
- When heated, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapors may travel to source of ignition and flash back.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

HEALTH

- TOXIC; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Spill

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂, dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- **FOR CHLOROSILANES, DO NOT USE WATER**; use AFFF alcohol-resistant medium expansion foam.
- Move containers from fire area if you can do it without risk.
- Do not use straight streams.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- **FOR CHLOROSILANES**, use AFFF alcohol-resistant medium expansion foam to reduce vapors.
- **DO NOT GET WATER on spilled substance or inside containers.**
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC**; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns, or death.
- Reaction with water or moist air will release toxic, corrosive or flammable gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars etc.).
- Substance will react with water (some violently), releasing corrosive and/or toxic gases.
- Reaction with water may generate much heat which will increase the concentration of fumes in the air.
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated or if contaminated with water.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations **ONLY**; it is not effective in spill situations.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, **ISOLATE** for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Note: Most foams will react with the material and release corrosive/toxic gases.

Small Fires • CO₂ (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam.

Large Fires

- Water spray, fog or alcohol-resistant foam.
- Move containers from fire area if you can do it without risk.
- Do not use straight streams.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- A vapor suppressing foam may be used to reduce vapors.
- DO NOT GET WATER INSIDE CONTAINERS.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

- Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Inhalation or contact with substance may cause infection, disease, or death.
- Runoff from fire control may cause pollution.
- **Note: Damaged packages containing solid CO₂ as a refrigerant may produce water or frost from condensation of air. Do not touch this liquid as it could be contaminated by the contents of the parcel.**

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Some may be transported in flammable liquids.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Obtain identity of substance involved.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, soda ash, lime or sand.

Large Fires

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.
- Do not scatter spilled material with high pressure water streams.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Absorb with earth, sand or other non-combustible material.
- Cover damaged package or spilled material with damp towel or rag and keep wet with liquid bleach or other disinfectant.
- **DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.**

FIRST AID

- Move victim to a safe isolated area.

CAUTION: Victim may be a source of contamination.

- Call emergency medical care.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- **For further assistance, contact your local Poison Control Center.**
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS

HEALTH

- Inhalation of vapors or dust is extremely irritating.
- May cause burning of eyes and flow of tears.
- May cause coughing, difficult breathing and nausea.
- Brief exposure effects last only a few minutes.
- Exposure in an enclosed area may be very harmful.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Containers may explode when heated.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE**Small Fires**

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.

Small Spills

- Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.
- Effects should disappear after individual has been exposed to fresh air for approximately 10 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Vapors may cause dizziness or suffocation.
- Exposure in an enclosed area may be very harmful.
- Contact may irritate or burn skin and eyes.
- Fire may produce irritating and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but none ignite readily.
- Most vapors are heavier than air.
- Air/vapor mixtures may explode when ignited.
- Container may explode in heat of fire.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE****Small Fires**

- Dry chemical, CO₂ or water spray.

Large Fires

- Dry chemical, CO₂, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Stop leak if you can do it without risk.

Small Liquid Spills

- Take up with sand, earth or other noncombustible absorbent material.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Wash skin with soap and water.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Low-level radioactive material; very low radiation hazard to people.
- Quantity of material presents low radiation hazard if released from package during accident.
- Some radioactive materials cannot be detected by commonly available instruments.
- Packages do not have RADIOACTIVE I, II, or III labels. Some may have EMPTY labels or may have the word "Radioactive" in the package marking.
- If any radioactive contamination occurs, it will be extremely low level.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Radioactivity does not change flammability or other properties of materials.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.

Liquid Spills

- Cover with sand, earth or other noncombustible absorbent material.
- Cover powder spill with plastic sheet or tarp to minimize spreading.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Low radiation hazard when material is inside container. If material is released from package or bulk container, hazard will vary from low to moderate. Level of hazard will depend on the type and amount of radioactivity, the kind of material it is in, and/or the surfaces it is on.
- Some material may be released from packages during accidents of moderate severity. This poses little risk to people.
- Released radioactive materials or contaminated objects usually will be visible if packaging fails.
- Some exclusive use shipments of bulk and packaged materials will not have "RADIOACTIVE" labels. • Placards, markings, and shipping papers provide identification.
- Some packages may have a "RADIOACTIVE" label and a second hazard label. The second hazard is usually greater than the radiation hazard; so follow this Guide as well as the response Guide for the second hazard class label.
- Some radioactive materials cannot be detected by commonly available instruments.
- Runoff from control of cargo fire may cause low-level pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Uranium and Thorium metal cuttings or granules may ignite spontaneously if exposed to air (see Guide 136).
- Nitrates are oxidizers and may ignite other combustibles (see Guide 141).

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE

FIRE

- Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).
- Dike fire-control water for later disposal.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.

Liquid Spills

- Cover with sand, earth or other noncombustible absorbent material.
- Dike to collect large liquid spills.
- Cover powder spill with plastic sheet or tarp to minimize spreading.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Partial releases might be expected if "Type A" packages are damaged in moderately severe accidents.
- Type B packages (large and small, usually metal) identified as "Type B" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, life endangering releases are not expected in accidents involving "Type B" packages except those of utmost severity.
- Radioactive White-I labels indicate radiation levels outside undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).
- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from the package.
- Some radioactive materials cannot be detected by commonly available instruments.
- Water from cargo fire control may cause pollution.

FIRE OR EXPLOSION

- Some of these materials may burn, but most do not ignite readily.
- Radioactivity does not change flammability or other properties of materials.
- Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE

FIRE

- Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).
- Dike fire-control water for later disposal.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.

Liquid Spills

- Cover with sand, earth or other noncombustible absorbent material.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external radiation hazard.
- Contamination and internal radiation hazards are not expected, but not impossible.
- Type A packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Radioactive sources may be released if "Type A" packages are damaged in moderately severe accidents.
- Type B packages (large and small, usually metal) identified as "Type B" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, life endangering releases are not expected in accidents involving "Type B" packages except those of utmost severity.
- Radioactive White-I labels indicate radiation levels outside undamaged packages are very low (less than 0.005 mSv/h (0.5 mrem/h)).
- Radioactive Yellow-II and Yellow-III labeled packages have higher radiation levels. The transport index (TI) on the label identifies the maximum radiation level in mrem/h one meter from the package.
- Commonly available instruments can detect most of these materials.
- Water from cargo fire control is not expected to cause pollution.

FIRE OR EXPLOSION

- Packagings can burn completely without risk of content loss from sealed source capsule.
- Radioactivity does not change flammability or other properties of materials.
- Radioactive source capsules and Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F).

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Delay final cleanup until instructions or advice is received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE**FIRE**

- Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.
- If source is identified as being out of package; stay away and await advice from Radiation Authority.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Persons exposed to special form sources are not likely to be contaminated with radioactive material.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.

POTENTIAL HAZARDS

HEALTH

- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.
- Undamaged packages are safe; contents of damaged packages may cause external and/or internal radiation exposure.
- Packages (drums or boxes) identified as "Type AF" or "IF" by marking on packages or by shipping papers contain materials that are not life endangering if released. External radiation levels are low and packages are designed, evaluated, and tested to control releases and to prevent a fission chain reaction under severe transport accident conditions.
- Packages (metal and usually very heavy) identified as "Type B(U)F" or "B(M)F" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, fission chain reactions are prevented and releases are not expected to be life endangering for all accidents except those of utmost severity.
- The transport index (TI) shown on labels or a shipping paper might not indicate the radiation level at one meter from the package; instead, it may indicate controls needed during transport because of the fissile properties of the materials.
- Some radioactive materials cannot be detected by commonly available instruments.
- Water from cargo fire control is not expected to cause pollution.

FIRE OR EXPLOSION

- These materials are not flammable and packagings are designed to withstand fires without damage to contents.
- Radioactivity does not change flammability or other properties of materials.
- Type AF, Type IF, and Type B packages are designed and evaluated to withstand total engulfment in flames at temperatures of 800°C (1475°F) for a period of 30 minutes.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE

FIRE

- Presence of radioactive material will not change effectiveness of fire control techniques.
- Move containers from fire area if you can do it without risk.
- Do not move damaged packages; move undamaged packages out of fire zone.

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Slightly damaged or damp outer surfaces seldom indicate failure of packaging since most have an inner container.

Liquid Spills

- Package contents are seldom liquid. If any radioactive contamination resulting from a liquid release is present, it probably will be low-level.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Chemical hazard greatly exceeds radiation hazard.
- Substance reacts with water and water vapor in air to form toxic and corrosive hydrogen fluoride gas and an extremely irritating and corrosive, white-colored, water-soluble residue.
- If inhaled, may be fatal.
- Direct contact causes chemical burns to skin, eyes, and respiratory tract.
- Low-level radioactive material; very low radiation hazard to people.
- Runoff from control of cargo fire may cause low-level pollution.
- Radiation presents minimal risk to transport workers, emergency response personnel, and the public during transportation accidents. Packaging durability is related to potential hazards of material.

FIRE OR EXPLOSION

- Substance does not burn.
- Containers in protective overpacks (Horizontal cylindrical shape with short legs for tie-downs), also identified as "Type AF" or "B(U)F" on shipping papers or by marking on the overpack, are designed and evaluated to withstand severe accidents including total engulfment in flames at temperatures of 800°C (1475°F).
- Container may explode in heat of fire. • The material may react violently with fuels.
- Radioactivity does not change flammability or other properties of materials.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- **Priorities for rescue, life-saving, first aid, and control of fire and other hazards are higher than the priority for measuring radiation levels.**
- Radiation Authority must be notified of accident conditions, and is usually responsible for radiological decisions.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. • Stay upwind. • Keep unauthorized personnel away.
- Detain or isolate uninjured persons or equipment suspected to be contaminated; delay decontamination and cleanup until instructions are received from Radiation Authority.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

EMERGENCY RESPONSE

FIRE

- DO NOT USE WATER OR FOAM ON MATERIAL ITSELF.
- Move containers from fire area if you can do it without risk.

Small Fires

- Dry chemical or CO₂.

Large Fires

- Water spray, fog or regular foam.
- Cool containers with flooding quantities of water until well after fire is out.
- If this is impossible, withdraw from area and let fire burn.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Do not touch damaged packages or spilled material.
- Without fire or smoke, leak will be evident by visible and irritating vapors and residue forming at the point of release.
- Use fine water spray to reduce vapors; do not put water directly on point of material release from container.
- Residue buildup may self-seal small leaks.
- Dike far ahead of spill to collect runoff water.

FIRST AID

- Medical problems take priority over radiological concerns.
- Use first aid treatment according to the nature of the injury.
- Do not delay care and transport of a seriously injured person.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Injured persons who contacted released material may be a minor contamination problem to contacted persons, equipment and facilities.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; may be fatal if inhaled.**
- Vapors are extremely irritating.
- Contact with gas or liquefied gas will cause burns, severe injury and/or frostbite.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- Substance does not burn but will support combustion.
- This is a strong oxidizer and will react vigorously or explosively with many materials including fuels.
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical, soda ash, lime or sand.

Large Fires

- Water spray, fog (flooding amounts).
- Do not get water inside containers.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- If you have not donned special protective clothing approved for this material, do not expose yourself to any risk of this material touching you.
- **Do not direct water at spill or source of leak.**
- A fine water spray remotely directed to the edge of the spill pool can be used to direct and maintain a hot flare fire which will burn the spilled material in a controlled manner.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Ventilate the area.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Clothing frozen to the skin should be thawed before being removed.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- **TOXIC; Extremely Hazardous.**
- Inhalation extremely dangerous; may be fatal.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Odorless, will not be detected by sense of smell.

FIRE OR EXPLOSION

- **EXTREMELY FLAMMABLE.**
- May be ignited by heat, sparks or flames.
- Flame may be invisible.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Vapor explosion and poison hazard indoors, outdoors or in sewers.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 100 to 200 meters (330 to 660 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.
- Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

EVACUATION**Spill**

- See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE**FIRE**

- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires

- Dry chemical, CO₂ or water spray.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- Keep victim warm and quiet. • Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Substance is transported in molten form at a temperature above 705°C (1300°F).
- Violent reaction with water; contact may cause an explosion or may produce a flammable gas.
- Will ignite combustible materials (wood, paper, oil, debris, etc.).
- Contact with nitrates or other oxidizers may cause an explosion.
- Contact with containers or other materials, including cold, wet or dirty tools, may cause an explosion.
- Contact with concrete will cause spalling and small pops.

HEALTH

- Contact causes severe burns to skin and eyes.
- Fire may produce irritating and/or toxic gases.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 50 to 100 meters (160 to 330 feet) in all directions.
- Keep unauthorized personnel away.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear flame retardant structural firefighters' protective clothing, including faceshield, helmet and gloves, this will provide limited thermal protection.

EMERGENCY RESPONSE**FIRE**

- **Do Not Use Water**, except in life threatening situations and then only in a fine spray.
- **Do not use halogenated extinguishing agents or foam.**
- Move combustibles out of path of advancing pool if you can do so without risk.
- Extinguish fires started by molten material by using appropriate method for the burning material; keep water, halogenated extinguishing agents and foam away from the molten material.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not attempt to stop leak, due to danger of explosion.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Substance is very fluid, spreads quickly, and may splash. Do not try to stop it with shovels or other objects.
- Dike far ahead of spill; use dry sand to contain the flow of material.
- Where possible allow molten material to solidify naturally.
- Avoid contact even after material solidifies. Molten, heated and cold aluminum look alike; do not touch unless you know it is cold.
- Clean up under the supervision of an expert after material has solidified.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- For severe burns, immediate medical attention is required.
- Removal of solidified molten material from skin requires medical assistance.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- May react violently or explosively on contact with water.
- Some are transported in flammable liquids.
- May be ignited by friction, heat, sparks or flames.
- Some of these materials will burn with intense heat.
- Dusts or fumes may form explosive mixtures in air.
- Containers may explode when heated.
- May re-ignite after fire is extinguished.

HEALTH

- Oxides from metallic fires are a severe health hazard.
- Inhalation or contact with substance or decomposition products may cause severe injury or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 50 meters (160 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- **DO NOT USE WATER, FOAM OR CO₂.**
- Dousing metallic fires with water may generate hydrogen gas, an extremely dangerous explosion hazard, particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).
- Use DRY sand, graphite powder, dry sodium chloride based extinguishers, G-1® or Met-L-X® powder.
- Confining and smothering metal fires is preferable rather than applying water.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks or Car/Trailer Loads

- If impossible to extinguish, protect surroundings and allow fire to burn itself out.

SPILL OR LEAK

- **ELIMINATE** all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air. • Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**FIRE OR EXPLOSION**

- Some may burn but none ignite readily.
- Some may polymerize (P) explosively when heated or involved in a fire.
- Containers may explode when heated.
- Some may be transported hot.

HEALTH

- Inhalation of material may be harmful.
- Contact may cause burns to skin and eyes.
- Inhalation of Asbestos dust may have a damaging effect on the lungs.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Fire**

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

- Dry chemical, CO₂, water spray or regular foam.

Large Fires

- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Do not scatter spilled material with high pressure water streams.
- Dike fire-control water for later disposal.

Fire Involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from the ends of tanks.

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent dust cloud.
- Avoid inhalation of asbestos dust.

Small Dry Spills

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills

- Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

- Dike far ahead of liquid spill for later disposal.
- Cover powder spill with plastic sheet or tarp to minimize spreading.
- Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

POTENTIAL HAZARDS**HEALTH**

- Inhalation of vapors or contact with substance will result in contamination and potential harmful effects.
- Fire will produce irritating, corrosive and/or toxic gases.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may react upon heating to produce corrosive and/or toxic fumes.
- Runoff may pollute waterways.

PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- Isolate spill or leak area immediately for at least 10 to 25 meters (30 to 80 feet) in all directions.
- Stay upwind.
- Keep unauthorized personnel away.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION**Large Spill**

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- When any large container is involved in a fire, consider initial evacuation for 500 meters (1/3 mile) in all directions.

EMERGENCY RESPONSE

FIRE

- Use extinguishing agent suitable for type of surrounding fire.
- **Do not direct water at the heated metal.**

SPILL OR LEAK

- Do not touch or walk through spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Do not use steel or aluminium tools or equipment.
- Cover with earth, sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
- For mercury, use a mercury spill kit.
- Mercury spill areas may be subsequently treated with calcium sulphide/calcium sulfide or with sodium thiosulphate/sodium thiosulfate wash to neutralize any residual mercury.

FIRST AID

- Move victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

NOTES

INTRODUCTION TO THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

The Table of Initial Isolation and Protective Action Distances suggests distances useful to protect people from vapors resulting from spills involving dangerous goods which are considered poisonous/toxic by inhalation (PIH). The Table provides first responders with initial guidance until technically qualified emergency response personnel are available. Distances show areas likely to be affected during the first 30 minutes after materials are spilled and could increase with time.

The **Initial Isolation Zone** defines an area SURROUNDING the incident in which persons may be exposed to dangerous (upwind) and life threatening (downwind) concentrations of material. The **Protective Action Zone** defines an area DOWNWIND from the incident in which persons may become incapacitated and unable to take protective action and/or incur serious or irreversible health effects. The Table provides specific guidance for small and large spills occurring day or night.

Adjusting distances for a specific incident involves many interdependent variables and should be made only by personnel technically qualified to make such adjustments. For this reason, no precise guidance can be provided in this document to aid in adjusting the table distances; however, general guidance follows.

Factors That May Change the Protective Action Distances

The Guide for a material clearly indicates the evacuation distance required to deal with a fragmentation hazard. If the material becomes involved in a **FIRE**, the toxic hazard may become less important than the fire or explosion hazard.

If more than one tank car, cargo tank, portable tank, or large cylinder involved in the incident is leaking, **LARGE SPILL** distances may need to be increased.

For material with a protective action distance of 11.0+ km (7.0+ miles), the actual distance can be larger in certain atmospheric conditions. If the dangerous goods vapor plume is channeled in a valley or between many tall buildings, distances may be larger than shown in the Table due to less mixing of the plume with the atmosphere. Daytime spills in regions with known strong inversions or snow cover, or occurring near sunset, accompanied by a steady wind, may require an increase in the protective action distance. When these conditions are present, airborne contaminants mix and disperse more slowly and may travel much farther downwind.

Materials producing significant toxic vapors when spilled in water

Materials that react with water to produce toxic vapors are addressed by the appropriate 3-digit guide. Materials listed at the end of the Table produce significant toxic vapors when spilled in water. Only materials which produce sufficient toxic vapors to endanger the public beyond 0.5 km (1/3 mile) downwind of the spill are included. When spilled in water, materials on this list may generate a toxic vapor hazard which endangers the public up to 10 km (6.2 miles) downwind of the incident.

When a water reactive PIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

PROTECTIVE ACTION DECISION FACTORS TO CONSIDER

The choice of protective options for a given situation depends on a number of factors. For some cases, evacuation may be the best option; in others, in-place protection may be the best course. Sometimes, these two actions may be used in combination. In any emergency, officials need to quickly give the public instructions. The public will need continuing information and instructions while being evacuated or protected in-place.

Proper evaluation of the factors listed below will determine the effectiveness of evacuation or in-place protection. The importance of these factors can vary with emergency conditions. In specific emergencies, other factors may need to be identified and considered as well. This list indicates what kind of information may be needed to make the initial decision.

The Dangerous Goods

- Degree of health hazard
- Amount involved
- Containment/control of release
- Rate of vapor movement

The Population Threatened

- Location
- Number of people
- Time to evacuate or protect in-place
- Ability to control evacuation or protect in-place
- Building types and availability
- Special institutions or populations, e.g., nursing homes, hospitals, prisons

Weather Conditions

- Effect on vapor and cloud movement
- Potential for change
- Effect on evacuation or protection in-place

HOW TO USE THE TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

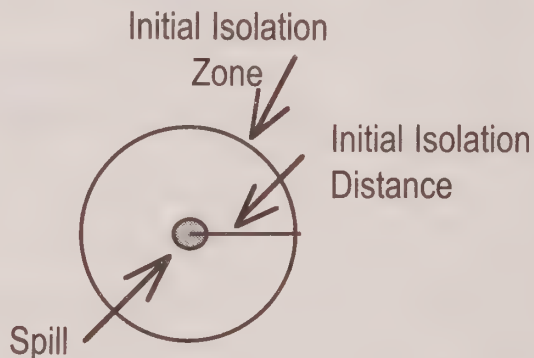
(1) The responder should already have:

- Identified the material by its ID Number and Name; (if an ID Number cannot be found, use the name of material index in the blue-bordered pages to locate that number.)
- Read the Guide for that material and taken the emergency actions recommended;
- **Noted the wind direction.**

(2) Look in this Table (the green-bordered pages) for the ID Number and Name of the Material involved in the incident. Some ID Numbers have more than one shipping name listed—look for the specific name of the material. (If the shipping name is not known and the Table lists more than one name for the same ID Number, use the entry with the largest protective action distances.)

(3) Determine if the incident involves a SMALL or LARGE spill and if DAY or NIGHT. Generally, a SMALL SPILL is one which involves a single, small package (i.e., up to a 208 liter [55 U.S. gallon] drum), a small cylinder, or a small leak from a large package. A LARGE SPILL is one which involves a spill from a large package, or multiple spills from many small packages. DAY is any time after sunrise and before sunset. NIGHT is any time between sunset and sunrise.

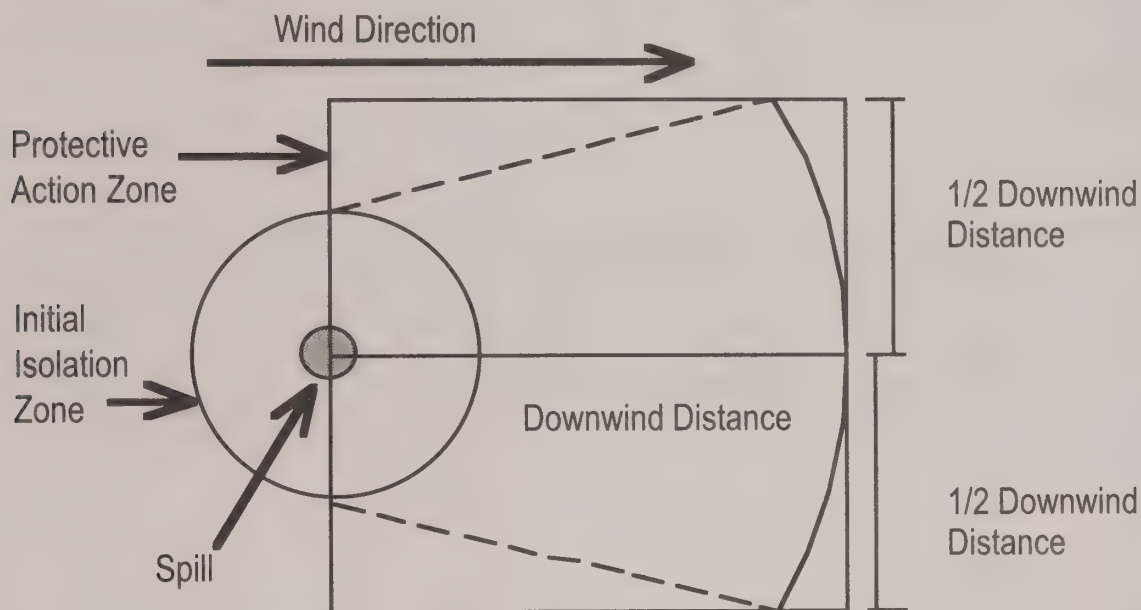
(4) Look up the initial ISOLATION distance. Direct all persons to move, in a crosswind direction, away from the spill to the distance specified—in meters and feet. Turn to the last green-bordered page if no distances are given and the material is spilled in water.



(5) Next, look up the initial PROTECTIVE ACTION DISTANCE shown in the Table. For a given dangerous goods, spill size, and whether day or night, the Table gives the downwind distance—in kilometers and miles—for which protective actions should be considered. For practical purposes, the Protective Action Zone (i.e., the area in which people are at risk of harmful exposure) is a square, whose length and width are the same as the downwind distance shown in the Table. Turn to the last green-bordered page if no distances are given and the material is spilled in water.

(6) Initiate Protective Actions to the extent possible, beginning with those closest to the spill site and working away from the site in the downwind direction. When a water-reactive PIH producing material is spilled into a river or stream, the source of the toxic gas may move with the current or stretch from the spill point downstream for a substantial distance.

The shape of the area in which protective actions should be taken (the Protective Action Zone) is shown in this figure. The spill is located at the center of the small circle. The larger circle represents the INITIAL ISOLATION zone around the spill.



NOTE: See "Introduction To The Table Of Initial Isolation And Protective Action Distances" for factors which may increase or decrease Protective Action Distances.

Call the emergency response telephone number listed on the shipping paper, or the appropriate response agency as soon as possible for additional information on the material, safety precautions, and mitigation procedures.

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.		NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
			ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-			
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1005	Ammonia, anhydrous	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)			
1005	Ammonia, anhydrous, liquefied									
1005	Ammonia solution, with more than 50% Ammonia	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)			
1005	Anhydrous ammonia									
1005	Anhydrous ammonia, liquefied	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)			
1008	Boron trifluoride									
1008	Boron trifluoride, compressed	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)			
1016	Carbon monoxide									
1016	Carbon monoxide, compressed	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)			
1017	Chlorine	60 m (200 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.8 km (0.5 mi)	3.1 km (1.9 mi)			
1023	Coal gas									
1023	Coal gas, compressed	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)			
1026	Cyanogen									
1026	Cyanogen, liquefied									
1026	Cyanogen gas	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)			
1040	Ethylene oxide									
1040	Ethylene oxide with Nitrogen	60 m (200 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)			
1045	Fluorine									
1045	Fluorine, compressed	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)			
1048	Hydrogen bromide, anhydrous	60 m (200 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)			
1050	Hydrogen chloride, anhydrous	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)			

1051	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)
1051	Hydrocyanic acid, liquefied						
1051	Hydrocyanic acid, anhydrous, stabilized						
1051	Hydrogen cyanide, stabilized						
1052	Hydrogen fluoride, anhydrous	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
1053	Hydrogen sulfide						
1053	Hydrogen sulfide, liquefied						
1053	Hydrogen sulphide	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)
1053	Hydrogen sulphide, liquefied						
1062	Methyl bromide	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)
1064	Methyl mercaptan	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)
1067	Dinitrogen tetroxide						
1067	Dinitrogen tetroxide, liquefied						
1067	Nitrogen dioxide						
1067	Nitrogen dioxide, liquefied						
1067	Nitrogen peroxide, liquid	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)
1067	Nitrogen tetroxide, liquid						
1069	Nitrosyl chloride	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	185 m (600 ft)	0.8 km (0.5 mi)	3.2 km (2.0 mi)
1071	Oil gas						
1071	Oil gas, compressed	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	30 m (100 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
1076	Diphosgene (when "Inhalation Hazard" is on a package or shipping paper)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
1076	Phosgene						
1079	Sulfur dioxide						
1079	Sulfur dioxide, liquefied						
1079	Sulphur dioxide	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
1079	Sulphur dioxide, liquefied						

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)		(From a large package or from many small packages)					
		ISOLATE in all Directions Meters (Feet)	PROTECT persons Downwind during- DAY Kilometers (Miles)	PROTECT persons Downwind during- NIGHT Kilometers (Miles)	ISOLATE in all Directions Meters (Feet)	PROTECT persons Downwind during- DAY Kilometers (Miles)	PROTECT persons Downwind during- NIGHT Kilometers (Miles)		
1082	Trifluorochloroethylene	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)		
1082	Trifluorochloroethylene, inhibited								
1092	Acrolein, inhibited	125 m (400 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)	305 m (1000 ft)	1.9 km (1.2 mi)	8.4 km (5.2 mi)		
1098	Allyl alcohol	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)		
1135	Ethylene chlorohydrin	95 m (300 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)	275 m (900 ft)	1.6 km (1.0 mi)	6.9 km (4.3 mi)		
1143	Crotonaldehyde, inhibited	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)		
1143	Crotonaldehyde, stabilized								
1163	1,1-Dimethylhydrazine	125 m (400 ft)	0.6 km (0.4 mi)	3.1 km (1.9 mi)	365 m (1200 ft)	2.6 km (1.6 mi)	11.0+ km (7.0+ mi)		
1163	Dimethylhydrazine, unsymmetrical								
1182	Ethyl chloroformate	95 m (300 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi)	4.3 km (2.7 mi)		
1185	Ethyleneimine, inhibited	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		
1238	Methyl chloroformate	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.5 km (2.8 mi)		
1239	Methyl chloromethyl ether	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)		
1242	Methyldichlorosilane	DANGEROUS: When spilled in water, see list at the end of this table.							
1244	Methylhydrazine	125 m (400 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)	400 m (1300 ft)	2.9 km (1.8 mi)	11.0+ km (7.0+ mi)		
1250	Methyltrichlorosilane	DANGEROUS: When spilled in water, see list at the end of this table.							
1251	Methyl vinyl ketone	185 m (600 ft)	1.4 km (0.9 mi)	6.3 km (3.9 mi)	520 m (1700 ft)	5.1 km (3.2 mi)	11.0+ km (7.0+ mi)		
1251	Methyl vinyl ketone, stabilized								
1259	Nickel carbonyl	125 m (400 ft)	0.5 km (0.3 mi)	2.4 km (1.5 mi)	305 m (1000 ft)	1.9 km (1.2 mi)	8.7 km (5.4 mi)		

1295	Trichlorosilane	DANGEROUS:	When spilled in water, see list at the end of this table.		
1360	Calcium phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		
1380	Pentaborane	155 m (500 ft)	1.0 km (0.6 mi) 4.7 km (2.9 mi)	460 m (1500 ft)	3.9 km (2.4 mi) 11.0+ km (7.0+ mi)
1397	Aluminum phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		
1412	Lithium amide	DANGEROUS:	When spilled in water, see list at the end of this table.		
1419	Magnesium aluminum phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		
1432	Sodium phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		
1433	Stannic phosphides	DANGEROUS:	When spilled in water, see list at the end of this table.		
1471	Lithium hypochlorite, dry	DANGEROUS:	When spilled in water, see list at the end of this table.		
1471	Lithium hypochlorite mixture				
1471	Lithium hypochlorite mixtures, dry				
1510	Tetranitromethane	95 m (300 ft)	0.3 km (0.2 mi) 1.6 km (1.0 mi)	275 m (900 ft)	1.3 km (0.8 mi) 5.8 km (3.6 mi)
1541	Acetone cyanohydrin, stabilized	95 m (300 ft)	0.3 km (0.2 mi) 1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi) 4.8 km (3.0 mi)
1556	Methyldichloroarsine	60 m (200 ft)	0.3 km (0.2 mi) 1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi) 3.5 km (2.2 mi)
1560	Arsenic chloride	95 m (300 ft)	0.3 km (0.2 mi) 1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi) 4.7 km (2.9 mi)
1560	Arsenic trichloride				
1569	Bromoacetone	95 m (300 ft)	0.3 km (0.2 mi) 1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi) 3.9 km (2.4 mi)
1580	Chloropicrin	95 m (300 ft)	0.5 km (0.3 mi) 2.1 km (1.3 mi)	305 m (1000 ft)	1.8 km (1.1 mi) 7.7 km (4.8 mi)
1581	Chloropicrin and Methyl bromide mixture	95 m (300 ft)	0.5 km (0.3 mi) 2.1 km (1.3 mi)	305 m (1000 ft)	1.8 km (1.1 mi) 7.7 km (4.8 mi)
1581	Methyl bromide and Chloropicrin mixtures				
1581	Methyl bromide and more than 2% Chloropicrin mixture, liquid				

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)		(From a large package or from many small packages)		First		Then	
		ISOLATE in all Directions		PROTECT persons Downwind during-		ISOLATE in all Directions		PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1582	Chloropicrin and Methyl chloride mixture	95 m	(300 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)	305 m	(1000 ft)	1.8 km (1.1 mi)	7.7 km (4.8 mi)
1582	Methyl chloride and Chloropicrin mixtures								
1583	Chloropicrin, absorbed (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)	305 m	(1000 ft)	1.8 km (1.1 mi)	7.7 km (4.8 mi)
1583	Chloropicrin mixture, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)								
1589	Cyanogen chloride, inhibited	95 m	(300 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)	305 m	(1000 ft)	1.8 km (1.1 mi)	7.9 km (4.9 mi)
1595	Dimethyl sulfite	125 m	(400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km (1.4 mi)	10.1 km (6.3 mi)
1595	Dimethyl sulphate								
1605	Ethylene dibromide	60 m	(200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m	(500 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)
1612	Hexaethyl tetraphosphate and compressed gas mixture	60 m	(200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m	(600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)
1613	Hydrocyanic acid, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	60 m	(200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m	(600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)
1613	Hydrogen cyanide, aqueous solution, with not more than 20% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)								

1614	Hydrogen cyanide, anhydrous, stabilized (absorbed)	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)
1614	Hydrogen cyanide, stabilized (absorbed)						
1647	Ethylene dibromide and Methyl bromide mixture, liquid	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)
1647	Methyl bromide and Ethylene dibromide mixture, liquid						
1660	Nitric oxide	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.6 km (1.6 mi)
1660	Nitric oxide, compressed						
1670	Perchloromethyl mercaptan	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.7 km (2.9 mi)
1672	Phenylcarbamylamine chloride	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
1680	Potassium cyanide	DANGEROUS:	When spilled in water, see list at the end of this table.				
1689	Sodium cyanide	DANGEROUS:	When spilled in water, see list at the end of this table.				
1695	Chloroacetone, stabilized	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.2 km (2.0 mi)
1703	Tetraethyl dithiopyrophosphate and gases, in solution	125 m (400 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)	365 m (1200 ft)	2.4 km (1.5 mi)	10.9 km (6.8 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures						
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 more than 200 ppm but not more than 5000 ppm)	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
1703	Tetraethyl dithiopyrophosphate and gases, mixtures, or in solution (LC50 not more than 200 ppm)	125 m (400 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)	365 m (1200 ft)	2.4 km (1.5 mi)	10.9 km (6.8 mi)
1705	Tetraethyl pyrophosphate and compressed gas mixtures	155 m (500 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	460 m (1500 ft)	4.0 km (2.5 mi)	11.0+ km (7.0+ mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-			
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 more than 200 ppm but not more than 5000 ppm)	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)		
1705	Tetraethyl pyrophosphate and compressed gas mixtures (LC50 not more than 200 ppm)	155 m (500 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	460 m (1500 ft)	4.0 km (2.5 mi)	11.0+ km (7.0+ mi)		
1714	Zinc phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.						
1716	Acetyl bromide	DANGEROUS:	When spilled in water, see list at the end of this table.						
1717	Acetyl chloride	DANGEROUS:	When spilled in water, see list at the end of this table.						
1722	Allyl chlorocarbonate	95 m (300 ft)	0.3 km (0.2 mi)	1.6 km (1.0 mi)	245 m (800 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)		
1722	Allyl chloroformate								
1725	Aluminum bromide, anhydrous	DANGEROUS:	When spilled in water, see list at the end of this table.						
1726	Aluminum chloride, anhydrous	DANGEROUS:	When spilled in water, see list at the end of this table.						
1732	Antimony pentafluoride	DANGEROUS:	When spilled in water, see list at the end of this table.						
1741	Boron trichloride	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)		
1744	Bromine	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)		
1744	Bromine, solution (when "Inhalation Hazard" is on a package or shipping paper)	30 m (100 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	125 m (400 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)		
1745	Bromine pentafluoride	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		

1746	Bromine trifluoride	95 m (300 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	245 m (800 ft)	1.3 km (0.8 mi)	5.3 km (3.3 mi)
1748	Calcium hypochlorite, dry	DANGEROUS:	When spilled in water, see list at the end of this table.				
1748	Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)						
1749	Chlorine trifluoride	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.7 km (2.9 mi)
1752	Chloroacetyl chloride	95 m (300 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi)	4.2 km (2.6 mi)
1754	Chlorosulfonic acid	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)
1754	Chlorosulfonic acid and Sulfur trioxide mixture						
1754	Chlorosulphonic acid						
1754	Chlorosulphonic acid and Sulphur trioxide mixture						
1754	Sulfur trioxide and Chlorosulfonic acid mixture						
1754	Sulphur trioxide and Chlorosulphonic acid mixture						
1758	Chromium oxychloride	DANGEROUS:	When spilled in water, see list at the end of this table.				
1777	Fluorosulfonic acid	DANGEROUS:	When spilled in water, see list at the end of this table.				
1777	Fluorosulphonic acid						
1806	Phosphorus pentachloride	DANGEROUS:	When spilled in water, see list at the end of this table.				
1809	Phosphorus trichloride	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)
1810	Phosphorus oxychloride	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)
1818	Silicon tetrachloride	DANGEROUS:	When spilled in water, see list at the end of this table.				
1828	Sulfur chlorides	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
1828	Sulphur chlorides						

"x" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

		SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)		(From a large package or from many small packages)					
ID No.	NAME OF MATERIAL	First ISOLATE in all Directions		Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	First	Then PROTECT persons Downwind during-	
		Meters (Feet)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
1829	Sulfur trioxide	60 m (200 ft)		0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)		0.6 km (0.4 mi)	2.9 km (1.8 mi)
1829	Sulfur trioxide, inhibited								
1829	Sulfur trioxide, stabilized								
1829	Sulfur trioxide, uninhibited								
1829	Sulphur trioxide								
1829	Sulphur trioxide, inhibited								
1829	Sulphur trioxide, stabilized								
1829	Sulphur trioxide, uninhibited								
1831	Oleum	60 m (200 ft)		0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)		0.6 km (0.4 mi)	2.9 km (1.8 mi)
1831	Oleum, with not less than 30% free Sulfur trioxide								
1831	Oleum, with not less than 30% free Sulphur trioxide								
1831	Sulfuric acid, fuming								
1831	Sulfuric acid, fuming, with not less than 30% free Sulfur trioxide								
1831	Sulphuric acid, fuming								
1831	Sulphuric acid, fuming, with not less than 30% free Sulphur trioxide								
1834	Sulfuryl chloride	95 m (300 ft)		0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)		1.0 km (0.6 mi)	3.9 km (2.4 mi)
1834	Sulphuryl chloride								
1836	Thionyl chloride	DANGEROUS: When spilled in water, see list at the end of this table.							
1838	Titanium tetrachloride	60 m (200 ft)		0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)		0.5 km (0.3 mi)	2.1 km (1.3 mi)
1859	Silicon tetrafluoride	60 m (200 ft)		0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)		0.5 km (0.3 mi)	1.9 km (1.2 mi)
1859	Silicon tetrafluoride, compressed								
1802	Ethylchloroarsine	95 m (300 ft)		0.5 km (0.3 mi)	1.6 km (1.0 mi)	275 m (900 ft)		1.4 km (0.9 mi)	6.1 km (3.8 mi)

		DANGEROUS:	When spilled in water, see list at the end of this table.					
1898	Acetyl iodide							
1911	Diborane	125 m (400 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)	305 m (1000 ft)	1.9 km (1.2 mi)	8.4 km (5.2 mi)	
1911	Diborane, compressed							
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	
1953	Compressed gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	
1953	Compressed gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-			
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)		
1953	Compressed gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		
1953	Compressed gas, toxic, flammable, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)								
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)		
1953	Compressed gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		
1953	Liquefied gas, flammable, poisonous, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone A)								

1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
1953	Liquefied gas, flammable, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
1953	Liquefied gas, flammable, toxic, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone A)						
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
1953	Liquefied gas, flammable, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
1953	Poisonous gas, flammable, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
1953	Poisonous liquid, flammable, n.o.s.						
1955	Compressed gas, poisonous, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone A)						

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)		(From a large package or from many small packages)		(From a large package or from many small packages)		(From a large package or from many small packages)	
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	2.3 km (1.4 mi)
1955	Compressed gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	245 m (800 ft)	1.1 km (0.7 mi)
1955	Compressed gas, toxic, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	2.3 km (1.4 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone C)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	245 m (800 ft)	1.1 km (0.7 mi)
1955	Compressed gas, toxic, n.o.s. (Inhalation Hazard Zone D)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)
1955	Liquefied gas, poisonous, n.o.s.	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	2.3 km (1.4 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	245 m (800 ft)	1.1 km (0.7 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)
1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	2.3 km (1.4 mi)

1955	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
1955	Liquefied gas, toxic, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
1955	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)
1955	Methyl bromide and nonflammable, nonliquefied compressed gas mixture	155 m (500 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	460 m (1500 ft)	4.0 km (2.5 mi)	11.0+ km (7.0+ mi)
1955	Organic phosphate compound mixed with compressed gas						
1955	Organic phosphate mixed with compressed gas						
1955	Organic phosphorus compound mixed with compressed gas						
1967	Insecticide gas, poisonous, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
1967	Insecticide gas, toxic, n.o.s.						
1967	Parathion and compressed gas mixture	95 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)	275 m (900 ft)	1.4 km (0.9 mi)	6.8 km (4.2 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
1975	Dinitrogen tetroxide and Nitric oxide mixture	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.6 km (1.6 mi)		
1975	Nitric oxide and Dinitrogen tetroxide mixture								
1975	Nitric oxide and Nitrogen dioxide mixture								
1975	Nitric oxide and Nitrogen tetroxide mixture								
1975	Nitrogen dioxide and Nitric oxide mixture								
1975	Nitrogen tetroxide and Nitric oxide mixture								
1994	Iron pentacarbonyl	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	185 m (600 ft)	0.8 km (0.5 mi)	3.2 km (2.0 mi)		
2004	Magnesium diamide	DANGEROUS:	When spilled in water, see list at the end of this table.		this table.				
2011	Magnesium phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		this table.				
2012	Potassium phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		this table.				
2013	Strontium phosphide	DANGEROUS:	When spilled in water, see list at the end of this table.		this table.				
2032	Nitric acid, fuming	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)		
2032	Nitric acid, red fuming								
2186	Hydrogen chloride, refrigerated liquid	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)		
2188	Arsine	125 m (400 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	335 m (1100 ft)	2.1 km (1.3 mi)	9.2 km (5.7 mi)		
2189	Dichlorosilane	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.6 km (1.6 mi)		
2190	Oxygen difluoride	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
2190	Oxygen difluoride, compressed								

2191 2191	Sulfuryl fluoride Sulphuryl fluoride	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.3 km (0.2 mi)	0.8 km (0.5 mi)
2192	Germane	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.3 km (1.4 mi)
2194	Selenium hexafluoride	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.5 km (2.8 mi)
2195	Tellurium hexafluoride	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)
2196	Tungsten hexafluoride	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)
2197	Hydrogen iodide, anhydrous	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)
2198 2198	Phosphorus pentafluoride Phosphorus pentafluoride, compressed	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)
2199	Phosphine	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
2202	Hydrogen selenide, anhydrous	155 m (500 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)	490 m (1600 ft)	4.7 km (2.9 mi)	11.0+ km (7.0+ mi)
2204 2204	Carbonyl sulfide Carbonyl sulphide	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.3 km (0.2 mi)	1.6 km (1.0 mi)
2232 2232	Chloroacetaldehyde 2-Chloroethanal	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)
2308 2308	Nitrosylsulfuric acid Nitrosylsulphuric acid	DANGEROUS: When spilled in water, see list at the end of this table.					
2334	Allylamine	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)
2337	Phenyl mercaptan	95 m (300 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)	275 m (900 ft)	1.3 km (0.8 mi)	6.0 km (3.7 mi)
2382 2382	1,2-Dimethylhydrazine Dimethylhydrazine, symmetrical	125 m (400 ft)	0.6 km (0.4 mi)	3.1 km (1.9 mi)	365 m (1200 ft)	2.6 km (1.6 mi)	11.0+ km (7.0+ mi)
2407	Isopropyl chloroformate	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)
2417 2417	Carbonyl fluoride Carbonyl fluoride, compressed	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	185 m (600 ft)	0.8 km (0.5 mi)	3.2 km (2.0 mi)
2418 2418	Sulfur tetrafluoride Sulphur tetrafluoride	95 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)	275 m (900 ft)	1.4 km (0.9 mi)	6.8 km (4.2 mi)

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TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

		SMALL SPILLS				LARGE SPILLS				
		(From a small package or small leak from a large package)		(From a large package or from many small packages)						
ID No.	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-				
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			
2420	Hexafluoroacetone	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)			
2421	Nitrogen trioxide	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)			
2438	Trimethylacetyl chloride	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.9 km (1.2 mi)			
2442	Trichloroacetyl chloride	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)			
2474	Thiophosgene	95 m (300 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi)	4.2 km (2.6 mi)			
2477	Methyl isothiocyanate	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)			
2480	Methyl isocyanate	125 m (400 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)	305 m (1000 ft)	1.9 km (1.2 mi)	8.2 km (5.1 mi)			
2481	Ethyl isocyanate	185 m (600 ft)	1.3 km (0.8 mi)	6.1 km (3.8 mi)	520 m (1700 ft)	5.0 km (3.1 mi)	11.0+ km (7.0+ mi)			
2482	n-Propyl isocyanate	155 m (500 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)	490 m (1600 ft)	4.7 km (2.9 mi)	11.0+ km (7.0+ mi)			
2483	Isopropyl isocyanate	155 m (500 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)	490 m (1600 ft)	4.7 km (2.9 mi)	11.0+ km (7.0+ mi)			
2484	tert-Butyl isocyanate	155 m (500 ft)	1.1 km (0.7 mi)	5.3 km (3.3 mi)	460 m (1500 ft)	4.3 km (2.7 mi)	11.0+ km (7.0+ mi)			
2485	n-Butyl isocyanate	155 m (500 ft)	1.1 km (0.7 mi)	5.3 km (3.3 mi)	460 m (1500 ft)	4.3 km (2.7 mi)	11.0+ km (7.0+ mi)			
2486	Isobutyl isocyanate	155 m (500 ft)	1.1 km (0.7 mi)	5.3 km (3.3 mi)	460 m (1500 ft)	4.3 km (2.7 mi)	11.0+ km (7.0+ mi)			
2487	Phenyl isocyanate	155 m (500 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	460 m (1500 ft)	4.0 km (2.5 mi)	11.0+ km (7.0+ mi)			
2488	Cyclohexyl isocyanate	155 m (500 ft)	1.0 km (0.6 mi)	4.7 km (2.9 mi)	460 m (1500 ft)	3.9 km (2.4 mi)	11.0+ km (7.0+ mi)			
2495	Iodine pentafluoride	DANGEROUS: When spilled in water, see list at the end of this table.								
2521	Diketene, inhibited	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)			
2534	Methylchlorosilane	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)			

2548	Chlorine pentafluoride	95 m (300 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi)	3.9 km (2.4 mi)
2600	Carbon monoxide and Hydrogen mixture	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)
2600	Carbon monoxide and Hydrogen mixture, compressed						
2600	Hydrogen and Carbon monoxide mixture						
2600	Hydrogen and Carbon monoxide mixture, compressed						
2605	Methoxymethyl isocyanate	155 m (500 ft)	1.3 km (0.8 mi)	5.6 km (3.5 mi)	490 m (1600 ft)	4.7 km (2.9 mi)	11.0+ km (7.0+ mi)
2606	Methyl orthosilicate	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.6 km (1.0 mi)
2644	Methyl iodide	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)
2646	Hexachlorocyclopentadiene	155 m (500 ft)	1.0 km (0.6 mi)	4.2 km (2.6 mi)	430 m (1400 ft)	3.4 km (2.1 mi)	11.0+ km (7.0+ mi)
2668	Chloroacetonitrile	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.3 km (1.4 mi)
2676	Stibine	125 m (400 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)	305 m (1000 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)
2683	Ammonium hydrosulfide, solution	DANGEROUS:	When spilled in water, see list at the end of this table.				
2683	Ammonium hydrosulphide, solution						
2683	Ammonium sulfide, solution						
2683	Ammonium sulphide, solution						
2692	Boron tribromide	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)
2740	n-Propyl chloroformate	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)
2742	sec-Butyl chloroformate	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
2742	Isobutyl chloroformate						
2743	n-Butyl chloroformate	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.3 km (1.4 mi)
2806	Lithium nitride	DANGEROUS:	When spilled in water, see list at the end of this table.				

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			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			
2810	Poisonous liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2810	Poisonous liquid, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2810	Poisonous liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2810	Poisonous liquid, organic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2810	Toxic liquid, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2810	Toxic liquid, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2810	Toxic liquid, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper) Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)

2810	Toxic liquid, organic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2826	Ethyl chloroformate	95 m (300 ft)	0.3 km (0.2 mi)	1.1 km (0.7 mi)	215 m (700 ft)	1.0 km (0.6 mi)	4.0 km (2.5 mi)
2845	Ethyl phosphonous dichloride, anhydrous	95 m (300 ft)	0.3 km (0.2 mi)	1.6 km (1.0 mi)	245 m (800 ft)	1.3 km (0.8 mi)	5.8 km (3.6 mi)
2845	Methyl phosphonous dichloride	95 m (300 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	245 m (800 ft)	1.1 km (0.7 mi)	5.1 km (3.2 mi)
2901	Bromine chloride	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)
2927	Ethyl phosphonoic dichloride, anhydrous	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	5.0 km (3.1 mi)
2927	Ethyl phosphorodichloridate	95 m (300 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)	275 m (900 ft)	1.4 km (0.9 mi)	6.3 km (3.9 mi)
2927	Poisonous liquid, corrosive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2927	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone A)						
2927	Poisonous liquid, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2927	Toxic liquid, corrosive, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2927	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone A)						
2927	Toxic liquid, corrosive, organic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)

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ID No.	NAME OF MATERIAL	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			
2929	Poisonous liquid, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2929	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone A)									
2929	Poisonous liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2929	Poisonous liquid, flammable, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2929	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)									
2929	Poisonous liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2929	Toxic liquid, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2929	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone A)									
2929	Toxic liquid, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)

2929	Toxic liquid, flammable, organic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
2929	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone A)						
2929	Toxic liquid, flammable, organic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
2977	Radioactive material, Uranium hexafluoride, fissile	DANGEROUS:	When spilled in water, see list at the end of this table.				
2977	Uranium hexafluoride, fissile containing more than 1% Uranium-235						
2978	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted	DANGEROUS:	When spilled in water, see list at the end of this table.				
2978	Uranium hexafluoride, fissile excepted						
2978	Uranium hexafluoride, low specific activity						
2978	Uranium hexafluoride, non-fissile						
3023	2-Methyl-2-heptanethiol	95 m (300 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.7 km (2.3 mi)
3023	tert-Octyl mercaptan						
3048	Aluminum phosphide pesticide	DANGEROUS:	When spilled in water, see list at the end of this table.				
3057	Trifluoroacetyl chloride	60 m (200 ft)	0.2 km (0.1 mi)	0.5 km (0.3 mi)	155 m (500 ft)	0.5 km (0.3 mi)	1.8 km (1.1 mi)
3079	Methacrylonitrile, inhibited	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.4 km (1.5 mi)
3083	Perchloryl fluoride	60 m (200 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)	155 m (500 ft)	0.5 km (0.3 mi)	2.1 km (1.3 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)				
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-	
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			
3122	Poisonous liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)									
3122	Poisonous liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone A)									
3122	Toxic liquid, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3123	Poisonous liquid, water- reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3123	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone A)									
3123	Poisonous liquid, water- reactive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)

3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)												
3123	Poisonous liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3123	Toxic liquid, water-reactive, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone A)												
3123	Toxic liquid, water-reactive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone A)												
3123	Toxic liquid, which in contact with water emits flammable gases, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)

"4" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-			
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
3160	Liquefied gas, poisonous, flammable, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone A)								
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)		
3160	Liquefied gas, poisonous, flammable, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		
3160	Liquefied gas, toxic, flammable, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone A)								
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)		
3160	Liquefied gas, toxic, flammable, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		

3162	Liquefied gas, poisonous, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone A)												
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3162	Liquefied gas, poisonous, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3162	Liquefied gas, toxic, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone A)												
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3162	Liquefied gas, toxic, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3246	Methanesulfonyl chloride	60 m	(200 ft)	0.2 km	(0.1 mi)	0.8 km	(0.5 mi)	185 m	(600 ft)	0.6 km	(0.4 mi)	2.9 km	(1.8 mi)
3246	Methanesulphonyl chloride												
3275	Nitriles, poisonous, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3275	Nitriles, toxic, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)												

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)		(From a large package or from many small packages)					
		ISOLATE in all Directions Meters (Feet)	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-	
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3276	Nitriles, poisonous, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)		0.3 km (0.2 mi)	1.3 km (0.8 mi)		245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3276	Nitriles, toxic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)								
3278	Organophosphorus compound, poisonous, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)		0.5 km (0.3 mi)	1.8 km (1.1 mi)		275 m (900 ft)	1.4 km (0.9 mi)	6.3 km (3.9 mi)
3278	Organophosphorus compound, toxic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)								
3279	Organophosphorus compound, poisonous, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)		0.5 km (0.3 mi)	1.8 km (1.1 mi)		275 m (900 ft)	1.4 km (0.9 mi)	6.3 km (3.9 mi)
3279	Organophosphorus compound, toxic, flammable, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)								
3280	Organoarsenic compound, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	95 m (300 ft)		0.5 km (0.3 mi)	1.6 km (1.0 mi)		275 m (900 ft)	1.4 km (0.9 mi)	6.1 km (3.8 mi)
3281	Metal carbonyls, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	125 m (400 ft)		0.5 km (0.3 mi)	2.4 km (1.5 mi)		305 m (1000 ft)	1.9 km (1.2 mi)	8.7 km (5.4 mi)

3287	Poisonous liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3287	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3287	Poisonous liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3287	Toxic liquid, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3287	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3287	Toxic liquid, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)						
3289	Poisonous liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (when "Inhalation Hazard" is on a package or shipping paper)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3289	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone A)						

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-			
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
3289	Toxic liquid, corrosive, inorganic, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
3294	Hydrogen cyanide, solution in alcohol, with not more than 45% Hydrogen cyanide (when "Inhalation Hazard" is on a package or shipping paper)	30 m (100 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	95 m (300 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)		
3300	Carbon dioxide and Ethylene oxide mixture, with more than 87% Ethylene oxide	60 m (200 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)	125 m (400 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)		
3303	Compressed gas, poisonous, oxidizing, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)		
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)								
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)		
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)		
3303	Compressed gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)		

3303	Compressed gas, toxic, oxidizing, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)												
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3303	Compressed gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3304	Compressed gas, poisonous, corrosive, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)												
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km	(0.5 mi)	3.4 km	(2.1 mi)	365 m	(1200 ft)	2.7 km	(1.7 mi)	11.0+ km	(7.0+ mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km	(0.4 mi)	2.7 km	(1.7 mi)	335 m	(1100 ft)	2.3 km	(1.4 mi)	10.0 km	(6.2 mi)
3304	Compressed gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km	(0.2 mi)	1.3 km	(0.8 mi)	245 m	(800 ft)	1.1 km	(0.7 mi)	4.8 km	(3.0 mi)
3304	Compressed gas, toxic, corrosive, n.o.s.	215 m	(700 ft)	1.9 km	(1.2 mi)	8.8 km	(5.5 mi)	610 m	(2000 ft)	7.4 km	(4.6 mi)	11.0+ km	(7.0+ mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)												

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

		SMALL SPILLS (From a small package or small leak from a large package)				LARGE SPILLS (From a large package or from many small packages)			
ID No.	NAME OF MATERIAL	ISOLATE in all Directions		Then PROTECT persons Downwind during-		ISOLATE in all Directions	Then PROTECT persons Downwind during-		
				DAY	NIGHT		DAY	NIGHT	
		Meters	(Feet)	Kilometers (Miles)	Kilometers (Miles)	Meters	Kilometers (Miles)	Kilometers (Miles)	
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3304	Compressed gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s.	215 m	(700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m	(2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)								
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3305	Compressed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s.	215 m	(700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m	(2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)								

3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3305	Compressed gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3306	Compressed gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS					LARGE SPILLS				
		(From a small package or small leak from a large package)		(From a large package or from many small packages)			(From a small package or small leak from a large package)		(From a large package or from many small packages)		
		ISOLATE in all Directions Meters (Feet)	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	First ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	First ISOLATE in all Directions Meters (Feet)
				DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	125 m (400 ft)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	335 m (1100 ft)
3306	Compressed gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	95 m (300 ft)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	245 m (800 ft)	245 m (800 ft)
3307	Liquefied gas, poisonous, oxidizing, n.o.s.	215 m (700 ft)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	215 m (700 ft)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	610 m (2000 ft)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	125 m (400 ft)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	365 m (1200 ft)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	125 m (400 ft)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)	335 m (1100 ft)	335 m (1100 ft)
3307	Liquefied gas, poisonous, oxidizing, n.o.s. (Inhalation Hazard Zone C)	95 m (300 ft)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	95 m (300 ft)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)	245 m (800 ft)	245 m (800 ft)
3307	Liquefied gas, toxic, oxidizing, n.o.s.	215 m (700 ft)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	215 m (700 ft)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)	610 m (2000 ft)	610 m (2000 ft)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	125 m (400 ft)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)	365 m (1200 ft)	365 m (1200 ft)

3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3307	Liquefied gas, toxic, oxidizing, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3308	Liquefied gas, poisonous, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3308	Liquefied gas, toxic, corrosive, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone A)						
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

		SMALL SPILLS				LARGE SPILLS			
		(From a small package or small leak from a large package)				(From a large package or from many small packages)			
ID No.	NAME OF MATERIAL	First ISOLATE in all Directions		Then PROTECT persons Downwind during-		First ISOLATE in all Directions		Then PROTECT persons Downwind during-	
		Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)	Meters	(Feet)	DAY Kilometers (Miles)	NIGHT Kilometers (Miles)
3308	Liquefied gas, toxic, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s.	215 m	(700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m	(2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)								
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3309	Liquefied gas, poisonous, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m	(300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m	(800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s.	215 m	(700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m	(2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone A)								
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m	(400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m	(1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone C)	125 m	(400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m	(1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)

3309	Liquefied gas, toxic, flammable, corrosive, n.o.s. (Inhalation Hazard Zone D)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s.	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3310	Liquefied gas, poisonous, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone D)	215 m (700 ft)	1.9 km (1.2 mi)	8.8 km (5.5 mi)	610 m (2000 ft)	7.4 km (4.6 mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone A)	125 m (400 ft)	0.8 km (0.5 mi)	3.4 km (2.1 mi)	365 m (1200 ft)	2.7 km (1.7 mi)	11.0+ km (7.0+ mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone B)	125 m (400 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)	335 m (1100 ft)	2.3 km (1.4 mi)	10.0 km (6.2 mi)
3310	Liquefied gas, toxic, oxidizing, corrosive, n.o.s. (Inhalation Hazard Zone C)	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.1 km (0.7 mi)	4.8 km (3.0 mi)
3318	Ammonia solution, with more than 50% Ammonia	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	60 m (200 ft)	0.2 km (0.1 mi)	0.3 km (0.2 mi)

"+" means distance can be larger in certain atmospheric conditions

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

ID No.	NAME OF MATERIAL	SMALL SPILLS				LARGE SPILLS				
		(From a small package or small leak from a large package)		(From a large package or from many small packages)		(From a small package or small leak from a large package)		(From a large package or from many small packages)		
		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-		ISOLATE in all Directions Meters (Feet)	Then PROTECT persons Downwind during-				
			DAY Kilometers (Miles)	NIGHT Kilometers (Miles)		DAY Kilometers (Miles)	NIGHT Kilometers (Miles)			
9191	Chlorine dioxide, hydrate, frozen	DANGEROUS:	When spilled in water, see list at the end of this table.							
9192	Fluorine, refrigerated liquid (cryogenic liquid)	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.7 km (1.7 mi)			
9202	Carbon monoxide, refrigerated liquid (cryogenic liquid)	30 m (100 ft)	0.2 km (0.1 mi)	0.2 km (0.1 mi)	95 m (300 ft)	0.2 km (0.1 mi)	0.6 km (0.4 mi)			
9206	Methyl phosphonic dichloride	95 m (300 ft)	0.3 km (0.2 mi)	1.4 km (0.9 mi)	245 m (800 ft)	1.3 km (0.8 mi)	5.5 km (3.4 mi)			
9263	Chloropivaloyl chloride	60 m (200 ft)	0.3 km (0.2 mi)	1.0 km (0.6 mi)	215 m (700 ft)	0.8 km (0.5 mi)	3.5 km (2.2 mi)			
9264	3,5-Dichloro-2,4,6-trifluoropyridine	95 m (300 ft)	0.3 km (0.2 mi)	1.3 km (0.8 mi)	245 m (800 ft)	1.0 km (0.6 mi)	4.5 km (2.8 mi)			
9269	Trimethoxysilane	60 m (200 ft)	0.2 km (0.1 mi)	0.8 km (0.5 mi)	185 m (600 ft)	0.6 km (0.4 mi)	2.9 km (1.8 mi)			

See Next Page for List of Dangerous Water Reactive Materials

"+" means distance can be larger in certain atmospheric conditions

LIST OF DANGEROUS WATER-REACTIVE MATERIALS

Materials Which Create Large Amounts of Toxic (PIH) Vapor When Spilled in Water
 * Dangerous From 0.5 to 10km (0.3 - 6.0 miles) downwind *

ID No.	Guide No.	Name of Material	Toxic Vapor (PIH) Produced	
1242	139	Methyldichlorosilane		HCl
1250	155	Methyltrichlorosilane		HCl
1295	139	Trichlorosilane		HCl
1360	139	Calcium phosphide		PH ₃
1397	139	Aluminum phosphide		PH ₃
1412	139	Lithium amide		NH ₃
1419	139	Magnesium aluminum phosphide		PH ₃
1432	139	Sodium phosphide		PH ₃
1433	139	Stannic phosphides		PH ₃
1471	140	Lithium hypochlorite, dry	Cl ₂	HCl
1471	140	Lithium hypochlorite mixture	Cl ₂	HCl
1471	140	Lithium hypochlorite mixtures, dry	Cl ₂	HCl
1680	157	Potassium cyanide		HCN
1689	157	Sodium cyanide		HCN
1714	139	Zinc phosphide		PH ₃
1716	156	Acetyl bromide		HBr
1717	132	Acetyl chloride		HCl
1725	137	Aluminum bromide, anhydrous		HBr
1726	137	Aluminum chloride, anhydrous		HCl
1732	157	Antimony pentafluoride		HF
1748	140	Calcium hypochlorite, dry	Cl ₂	HCl
1748	140	Calcium hypochlorite mixture, dry, with more than 39% available Chlorine (8.8% available Oxygen)	Cl ₂	HCl
1758	137	Chromium oxychloride		HCl
1777	137	Fluorosulfonic acid		HF
1777	137	Fluorosulphonic acid		HF

Key to PIH Formulas:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

LIST OF DANGEROUS WATER-REACTIVE MATERIALS

Materials Which Create Large Amounts of Toxic (PIH) Vapor *When Spilled in Water*
 * Dangerous From 0.5 to 10km (0.3 - 6.0 miles) downwind *

UN	Guide No.	Name of Material	Toxic Vapor (PIH) Produced	
06	137	Phosphorus pentachloride		HCl
18	156	Silicon tetrachloride		HCl
36	137	Thionyl chloride	HCl	SO ₂
98	156	Acetyl iodide		HI
04	135	Magnesium diamide		NH ₃
11	139	Magnesium phosphide		PH ₃
12	139	Potassium phosphide		PH ₃
13	139	Strontium phosphide		PH ₃
08	157	Nitrosylsulfuric acid		NO ₂
08	157	Nitrosylsulphuric acid		NO ₂
95	144	Iodine pentafluoride		HF
83	132	Ammonium hydrosulfide, solution	NH ₃	H ₂ S
83	132	Ammonium hydrosulphide, solution	NH ₃	H ₂ S
83	132	Ammonium sulfide, solution	NH ₃	H ₂ S
83	132	Ammonium sulphide, solution	NH ₃	H ₂ S
06	138	Lithium nitride		NH ₃
77	166	Radioactive material, Uranium hexafluoride, fissile		HF
77	166	Uranium hexafluoride, fissile containing more than 1% Uranium-235		HF
78	166	Radioactive material, Uranium hexafluoride, non-fissile or fissile excepted		HF
78	166	Uranium hexafluoride, fissile excepted		HF
78	166	Uranium hexafluoride, low specific activity		HF
78	166	Uranium hexafluoride, non-fissile		HF
48	157	Aluminum phosphide pesticide		PH ₃
91	143	Chlorine dioxide, hydrate, frozen		Cl ₂

Key to PIH Formulas:

Br ₂	Bromine	HF	Hydrogen fluoride	NO ₂	Nitrogen dioxide
Cl ₂	Chlorine	HI	Hydrogen iodide	PH ₃	Phosphine
HBr	Hydrogen bromide	H ₂ S	Hydrogen sulfide	SO ₂	Sulfur dioxide
HCl	Hydrogen chloride	H ₂ S	Hydrogen sulphide	SO ₂	Sulphur dioxide
HCN	Hydrogen cyanide	NH ₃	Ammonia		

PROTECTIVE ACTIONS

Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods. The Table of Initial Isolation and Protective Action Distances (green-bordered pages) predicts the size of downwind areas which could be affected by a cloud of dangerous gas. People in this area should be evacuated and/or protected in-place inside buildings.

Isolate Hazard Area and Deny Entry means keep everybody away from the area if they are not directly involved in emergency response operations. Unprotected emergency responders should not be allowed to enter the isolation zone. This "isolation" task is done first to establish control over the area of operations. This is the first step for any protective actions that may follow. See the Table of Isolation and Protective Action Distances (green-bordered pages) for more detailed information on specific materials.

Evacuate means move all people from a threatened area to a safer place. To perform evacuation, there must be enough time for people to be warned, to get ready, and to leave an area. If there is enough time, evacuation is the best protective action. Begin evacuating people nearby and those outdoors in direct view of the scene. When additional help arrives, expand the area to be evacuated downwind and crosswind to at least the extent recommended in this guidebook. Even after people move to the distances recommended, they may not be completely safe from harm. They should not be permitted to congregate at such distances. Send evacuees to a definite place, by a specific route, far enough away so they will not have to be moved again if the wind shifts.

In-Place Protection means people inside a building should remain inside until the danger passes. In the case of short-term spills and toxic vapor clouds, the material may be deflected by a multistory building and pass by without affecting the occupants of the building. **In-place protection is used when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed.** Direct the people inside to **close all doors and windows** and to **shut off all ventilating, heating and cooling systems**. In-place protection may not be the best option if (a) the vapors are flammable; (b) if it will take a long time for the gas to clear the area; or (c) if buildings cannot be closed tightly. Vehicles can offer some protection for a short period if the windows are closed and the ventilating systems are shut off. Vehicles are not as effective as buildings for in-place protection.

It is vital to maintain communications with competent persons inside the building so that they are advised about changing conditions. **Persons protected-in-place should be warned to stay far from windows** because of the danger from glass and projected metal fragments in a fire and/or explosion.

Every dangerous goods incident is different. Each will have special problems and concerns. Action to protect the public must be selected carefully. These pages can help with **initial** decisions on how to protect the public. Officials must continue to gather information and monitor the situation until the threat is removed.

BACKGROUND INFORMATION ON THE INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCE TABLE

Initial isolation and protective action distances for this guidebook were determined for small and large spills occurring day or night. Analysis used state-of-the-art source term and vapor cloud dispersion modeling, probabilistic application of the U.S. DOT's Hazardous Materials Incident Reporting System (HMIRS) incident data base, actual atmospheric data and the latest toxicological exposure guidelines available for each material. The complete report may be obtained from the U.S. Department of Transportation.

Source term modeling considered four factors: (1) the DOT HMIRS data base, (2) package sizes authorized to transport dangerous goods, (3) spill rates from damaged packages, and (4) release of vapors by evaporation from a liquid pool, direct release of gaseous vapors from a package into the atmosphere, or a combination of both. Liquid pool evaporation rates were calculated assuming a warm, sunny day, 35°C (95°F). A leaking package of 208 liters (55 U.S. gallons) or less (such as a drum, jerrican, or box with inner containers) is considered a small spill. Larger packages leaking less than 208 liters (55 U.S. gallons) and compressed gas leaking from a small cylinder are also considered small spills. A large spill involves many small leaking packages or a leaking package greater than 208 liters (55 U.S. gallons) (such as a cargo tank, portable tank, or one-ton compressed gas cylinder).

Dispersion models calculated downwind vapor concentrations based on actual, 24-hour, groundlevel and upper-air meteorological data from 61 cities (including Alaska and Hawaii) over a recent 5-year period. The models approximated atmospheric conditions at over 40,000 hypothetical U.S. incident sites derived from fatal accident locations involving trucks in the same 5-year period. A sensitivity study indicated heavy gas effects on vapor plume dispersion were minimal for the incident release sizes considered in this guidebook when compared to uncertainty in other input parameters. Data also showed that nighttime atmospheric conditions generally transported vapor plumes much greater distances than daytime conditions. Therefore, daytime and nighttime protective action guidance is provided. For this Table, a "Day" incident should be considered as occurring anytime after sunrise and before sunset, while "Night" includes all hours between sunset and sunrise.

Toxicological short-term exposure guidelines for the materials were applied to vapor concentrations to determine how far downwind the public is in danger. An independent panel of toxicological experts from industry and academia recommended that toxicological exposure guidelines be chosen from emergency response guidelines, occupational health guidelines, and lethal concentrations determined from animal studies. Specific means of application of these health criteria and adjustments based on time-of-exposure were made when recommended by the panel of experts.

Following this analysis, the resulting protective action distances were ordered from the 100th to the 0th percentile (largest protective action distance to the smallest) for both daytime and nighttime scenarios. The distances appearing in the Table provide guidance describing the **90th percentile incident**. This means that for a specific material analyzed at the incident locations mentioned above, 90 percent required protective actions less than the Table indicates, while 10 percent required larger distances.

The Protective Action Zone assumes that random changes in wind direction confine the vapor plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective action distance equal to the downwind protective action distance. Within the protective action zone a level of vapor concentration may exist resulting in nearly all unprotected persons becoming incapacitated and unable to take protective action and/or incurring serious or irreversible health effects. The Initial Isolation Zone is defined as an area, including upwind from the incident, within which dangerous concentrations of a material may exist.

Materials which produce toxic vapors when spilled in water

Materials listed at the end of the Table produce a significant toxic gas or vapor hazard when spilled in water. Only materials which produce sufficient toxic vapor to endanger the public beyond 0.5 km (1/3 mile) downwind of the spill are included. This was determined by analysis of the following factors: (1) rate of hydrolysis, (2) average values for water temperatures, (3) extent to which toxic product dissolves in water, (4) the amount of heat released by the reaction, and (5) the heat of reaction effect on (1) through (3) above. Other materials which react with water to produce toxic vapor but which do not pose a hazard greater than 0.5 km (1/3 mile) downwind are not included on this list. PIH materials which also react with water to produce more or different toxic gas were not included on the list if the hazard from the PIH material itself is greater than the hazard of the vapor produced by the PIH material in water.

PROTECTIVE CLOTHING

Street Clothing and Work Uniforms. These garments, such as uniforms worn by police and emergency medical services personnel, provide almost no protection from the harmful effects of dangerous goods.

Structural Fire Fighters' Protective Clothing (SFPC). This category of clothing, often called turnout or bunker gear, means the protective clothing normally worn by fire fighters during structural fire fighting operations. It includes a helmet, coat, pants, boots, gloves and a hood to cover parts of the head not protected by the helmet and facepiece. This clothing must be used with full-facepiece positive pressure self-contained breathing apparatus (SCBA). This protective clothing should, at a minimum, meet the U.S. Department of Labor's Occupational Safety and Health Administration's (OSHA) Fire Brigades Standard (29 CFR 1910.156). Structural fire fighters' protective clothing provides limited protection from heat, but may not provide adequate protection from the harmful vapors or liquids that are encountered during dangerous goods incidents. Each guide includes a statement about the use of SFPC in incidents involving those materials referenced by that guide. Some guides state that SFPC provides limited protection. In those cases, the responder wearing SFPC and SCBA may be able to perform an expedient, that is quick "in-and-out", operation. However, this type of operation can place the responder at risk of exposure, injury or death. The incident commander makes the decision to perform this operation only if an overriding benefit can be gained (i.e., perform an immediate rescue, turn off a valve to control a leak, etc.). The coverall-type protective clothing customarily worn to fight fires in forests or wild-lands is **not** SFPC and is not recommended nor referred to elsewhere in this guidebook.

Positive Pressure Self-Contained Breathing Apparatus (SCBA). This apparatus provides a constant, positive pressure flow of air within the facepiece, even if one inhales deeply while doing heavy work. Use apparatus certified by NIOSH and the Mine Safety and Health Administration in accordance with 30 CFR Part 11. Use it in accordance with the requirements for respiratory protection specified in the OSHA Hazardous Waste Site Operations and Emergency Response Standards (29 CFR 1910.120) and/or the Fire Brigade Standard (29 CFR 1910.156). Chemical-cartridge respirators or other filtering masks are not acceptable substitutes for positive pressure self-contained breathing apparatus. Demand-type SCBA does not meet the OSHA Fire Brigade Standard.

Chemical Protective Clothing and Equipment. Safe use of this type of protective clothing and equipment requires specific skills developed through training and experience. It is generally not available to, or used by, first responders. This type of special clothing may protect against one chemical, yet be readily permeated by chemicals for which it was not designed. Therefore, protective clothing should not be used unless it is compatible with the released material. This type of special clothing offers little or no protection against heat. Examples of this type of equipment have been described as (1) Vapor Protective Suits, also known as Totally-Encapsulating Chemical Protective (TECP) Suits or Level A* protection, and (2) Liquid-Splash Protective Suits, also known as Level B* protection. No single protective clothing material will protect you from all dangerous goods. Do not assume any protective clothing is resistant to heat or flame exposure unless it is so certified by the manufacturer.

* Consult glossary for additional protection levels under the heading "Protective Clothing".

FIRE AND SPILL CONTROL

FIRE CONTROL

Water is the most common and generally most available fire extinguishing agent. Exercise caution in selecting a fire extinguishing method since there are many factors to be considered in an incident. Water may be ineffective in fighting fires involving some materials; its effectiveness depends greatly on the method of application.

Spill fires involving flammable liquids are generally controlled by applying a fire fighting foam to the surface of the burning material. Fighting flammable liquid fires requires foam concentrate which is chemically compatible with the burning material, correct mixing of the foam concentrate with water and air, and careful application and maintenance of the foam blanket. There are two general types of fire fighting foam: regular and alcohol-resistant. Examples of regular foam are protein-base, fluoroprotein, and aqueous film forming foam (AFFF). Some flammable liquids, including many petroleum products, can be controlled by applying regular foam. Other flammable liquids, including polar solvents (flammable liquids which are water soluble) such as alcohols and ketones, have different chemical properties. A fire involving these materials cannot be easily controlled with regular foam and requires application of alcohol-resistant foam. Polar-solvent fires may be difficult to control and require a higher foam application rate than other flammable liquid fires (see NFPA/ANSI Standards 11 and 11A for further information). Refer to the appropriate guide to determine which type of foam is recommended. Although it is impossible to make specific recommendations for flammable liquids which have subsidiary corrosive or toxic hazards, alcohol-resistant foam may be effective for many of these materials. The emergency response telephone number on the shipping document, or the appropriate emergency response agency, should be contacted as soon as possible for guidance on the proper fire extinguishing agent to use. The final selection of the agent and method depends on many factors such as incident location, exposure hazards, size of the fire, environmental concerns, as well as the availability of extinguishing agents and equipment at the scene.

WATER REACTIVE MATERIALS

Water is sometimes used to flush spills and to reduce or direct vapors in spill situations. Some of the materials covered by the guidebook can react violently or even explosively with water. In these cases, consider letting the fire burn or leaving the spill alone (except to prevent its spreading by diking) until additional technical advice can be obtained. The applicable guides clearly warn you of these potentially dangerous reactions. These materials require technical advice since

- (1) water getting inside a ruptured or leaking container may cause an explosion;
- (2) water may be needed to cool adjoining containers to prevent their rupturing (exploding) or further spread of the fires;

- (3) water may be effective in mitigating an incident involving a water-reactive material only if it can be applied at a sufficient flooding rate for an extended period; and
- (4) the products from the reaction with water may be more toxic, corrosive, or otherwise more undesirable than the product of the fire without water applied.

When products from water-reaction are toxic (PIH) and produced in large amounts, consult the list on the last page of the Protective Action Table for more detailed information than found in the guide for that material.

When responding to an incident involving water-reactive materials, take into account the existing conditions such as wind, precipitation, location and accessibility to the incident, as well as the availability of the agents to control the fire or spill. Because there are variables to consider, the decision to use water on fires or spills involving water-reactive materials should be based on information from an authoritative source; for example, a producer of the material, who can be contacted through the emergency response telephone number or the appropriate emergency response agency.

VAPOR CONTROL

Limiting the amount of vapor released from a pool of flammable or corrosive liquids is an operational concern. It requires the use of proper protective clothing, specialized equipment, appropriate chemical agents, and skilled personnel. Before engaging in vapor control, get advice from an authoritative source as to the proper tactics.

There are several ways to minimize the amount of vapors escaping from pools of spilled liquids, such as special foams, adsorbing agents, absorbing agents, and neutralizing agents. To be effective, these vapor control methods must be selected for the specific material involved and performed in a manner that will mitigate, not worsen, the incident.

Where specific materials are known, such as at manufacturing or storage facilities, it is desirable for the dangerous goods response team to prearrange with the facility operators to select and stockpile these control agents in advance of a spill. In the field, first responders may not have the most effective vapor control agent for the material available. They are likely to have only water and only one type of fire fighting foam on their vehicles. If the available foam is inappropriate for use, they are likely to use water spray. Because the water is being used to form a vapor seal, care must be taken not to churn or further spread the spill during application. Vapors that do not react with water may be directed away from the site using the air currents surrounding the water spray. Before using water spray or other methods to safely control vapor emission or to suppress ignition, obtain technical advice, based on specific chemical name identification.

Glossary

Alcohol resistant foam	A foam that is resistant to "polar" chemicals such as ketones and esters which may break down other types of foam.
Burn	Refers to either a chemical or thermal burn, the former may be caused by corrosive substances and the latter by liquefied cryogenic gases, hot molten substances, or flames.
CO ₂	Carbon dioxide gas.
Cold zone	Area where the command post and support functions that are necessary to control the incident are located. This is also referred to as the clean zone or support zone in other documents. (NFPA 472)
Combustible liquid	Liquids which have a flash point greater than 60.5°C (141°F) and below 93°C (200°F). U.S. regulations permit a flammable liquid flashing between 38°C (100°F) and 60.5°C (141°F) to be reclassified as a combustible liquid.
Compatibility group	<p>Letters identify explosives that are deemed to be compatible. Class 1 materials are considered to be "compatible" if they can be transported together without significantly increasing either the probability of an incident or, for a given quantity, the magnitude of the effects of such an incident.</p> <p>A Substances which are expected to mass detonate very soon after fire reaches them.</p> <p>B Articles which are expected to mass detonate very soon after fire reaches them.</p> <p>C Substances or articles which may be readily ignited and burn violently without necessarily exploding.</p> <p>D Substances or articles which may mass detonate (with blast and/or fragment hazard) when exposed to fire.</p> <p>E, F Articles which may mass detonate in a fire.</p> <p>G Substances and articles which may mass explode and give off smoke or toxic gases.</p> <p>H Articles which in a fire may eject hazardous projectiles and dense white smoke.</p>

Glossary

- J Articles which may mass explode.
- K Articles which in a fire may eject hazardous projectiles and toxic gases.
- L Substances and articles which present a special risk and could be activated by exposure to air or water.
- N Articles which contain only extremely insensitive detonating substances and demonstrate a negligible probability of accidental ignition or propagation.
- S Packaged substances or articles which, if accidentally initiated, produce effects that are usually confined to the immediate vicinity.

Control zones	Designated areas at dangerous goods incidents, based on safety and the degree of hazard. Many terms are used to describe control zones; however, in this guidebook, these zones are defined as the hot, warm, and cold zones. (NFPA 472)
Cryogenic liquid	A refrigerated, liquefied gas that has a boiling point colder than -90°C (-130°F)] at atmospheric pressure.
Decomposition products	Products of a chemical or thermal break-down of a substance.
Decontamination	The removal of dangerous goods from personnel and equipment to the extent necessary to prevent potential adverse health effects. Always avoid direct or indirect contact with dangerous goods; however, if contact occurs, personnel should be decontaminated as soon as possible. Since the methods used to decontaminate personnel and equipment differ from one chemical to another, contact the chemical manufacturer, through CANUTEC, CHEMTREC®, CHEM-TEL, SETIQ or CECOM to determine the appropriate procedure. Contaminated clothing and equipment should be removed after use and stored in a controlled area (hot zone) until cleanup procedures can be initiated. In some cases, protective clothing and equipment cannot be decontaminated and must be disposed of in a proper manner.
Dry chemical	A preparation designed for fighting fires involving flammable liquids, pyrophoric substances and electrical equipment. Common types contain sodium bicarbonate or potassium bicarbonate.

Glossary

Edema	The accumulation of an excessive amount of watery fluid in cells and tissues. Pulmonary edema is an excessive buildup of water in the lungs, for instance, after inhalation of a gas that is corrosive to lung tissue.
Flammable liquid	A liquid that has a flash point of 60.5°C (141°F) or lower.
Flash point	Lowest temperature at which a liquid or solid gives off vapor in such a concentration that, when the vapor combines with air near the surface of the liquid or solid, a flammable mixture is formed. Hence, the lower the flash point, the more flammable the product.
Hot zone	Area immediately surrounding a dangerous goods incident which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. This zone is also referred to as exclusion zone or restricted zone in other documents. (NFPA 472)
Immiscible	In this guidebook, means that material does not mix readily with water.
Incident Command System (ICS)	An organized approach to control and manage operations at an emergency incident. The OSHA Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120(q)(3)(ii)) require that an ICS be implemented by the senior emergency response official on the scene. See Appendix C, Section 6, of the OSHA rule for more information on ICS.
Ignition source	Includes heat, sparks, flames, static electricity and friction. Ignition sources should always be eliminated.
Marine pollutant	Substances, articles or materials which, if released into the aquatic environment, may cause serious environmental damage.
Mass explosion	Explosion which affects almost the entire load virtually instantaneously.
Miscible	In this guidebook, means material that mixes readily with water.
Non-polar	See "Immiscible".

Glossary

Oxidizer	A chemical which supplies its own oxygen and which helps other combustible material burn more readily.
P	The letter "P" following a guide number in the yellow-bordered and blue-bordered pages identifies a material which may polymerize violently under high temperature conditions or contamination with other products. This polymerization will produce heat and high pressure buildup in containers which may explode or rupture.
pH	pH is a value that represents the acidity or alkalinity of a water solution. Pure water has a pH of 7. A pH value below 7 indicates an acid solution (a pH of 1 is extremely acidic). A pH above 7 indicates an alkaline solution (a pH of 14 is extremely alkaline). Acids and alkalies (bases) are commonly referred to as corrosive materials.
PIH	Poison Inhalation Hazard. Term used to describe gases and volatile liquids that are toxic when inhaled.
Protective clothing	<p>Includes both respiratory and physical protection. One cannot assign a level of protection to clothing or respiratory devices separately. These levels were accepted and defined by response organizations such as U.S. Coast Guard, NIOSH, and U.S. EPA.</p> <p>Level A: SCBA plus fully encapsulating chemical resistant clothing (permeation resistant).</p> <p>Level B: SCBA plus chemical resistant clothing (splash proof).</p> <p>Level C: Full or half-face respirator plus chemical resistant clothing (splash proof).</p> <p>Level D: Coverall with no respiratory protection.</p>
Polar	See "Miscible".
Pyrophoric	A substance which ignites spontaneously upon exposure to air (or oxygen).
Radioactivity	The property of some substances to emit invisible and potentially harmful radiation.

Glossary

Radiation Authority	As referred to in Guides 161 through 166 for radioactive materials, the Radiation Authority is either a Federal, state/provincial agency or state/province designated official. The responsibilities of this authority include evaluating radiological hazard conditions during normal operations and during emergencies. If the identity and telephone number of the authority are not known by emergency responders, or included in the local response plan, the information can be obtained from CANUTEC (613-996-6666), CHEMTREC® (1-800-424-9300) or CHEM-TEL (1-800-255-3924). They maintain a current list radiation authorities.
Refrigerated liquid	See "Cryogenic liquid".
Straight (solid) stream	Method used to apply or distribute water from the end of a hose. The water is delivered under pressure for penetration. In an efficient straight (solid) stream, approximately 90% of the water passes through an imaginary circle 38 cm (15 inches) in diameter at the breaking point. Hose (solid or straight) streams are frequently used to cool tanks and other equipment exposed to flammable liquid fires, or for washing burning spills away from danger points. However, straight streams will cause a spill fire to spread if improperly used or when directed into open containers of flammable and combustible liquids.
Vapor density	Weight of a volume of pure vapor or gas (with no air present) compared to the weight of an equal volume of dry air at the same temperature and pressure. A vapor density less than 1 (one) indicates that the vapor is lighter than air and will tend to rise. A vapor density greater than 1 (one) indicates that the vapor is heavier than air and may travel along the ground.
Vapor pressure	Pressure at which a liquid and its vapor are in equilibrium at a given temperature. Liquids with high vapor pressures evaporate rapidly.
Viscosity	Measure of a liquid's internal resistance to flow. This property is important because it indicates how fast a substance will leak out through holes in containers or tanks.
Warm zone	Area where personnel and equipment decontamination and hot zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. Also referred to as the decontamination, contamination reduction, or limited access zone in other documents. (NFPA 472)

Glossary

Water-sensitive

Substances which may produce flammable and/or toxic decomposition products upon contact with water.

Water spray (fog)

Method or way to apply or distribute water. The water is finely divided to provide for high heat absorption. Water spray patterns can range from about 10 to 90 degrees. Water spray streams can be used to extinguish or control the burning of a fire or to provide exposure protection for personnel, equipment, buildings, etc. **(This method can be used to absorb vapors, knock-down vapors or disperse vapors. Direct a water spray (fog), rather than a straight (solid) stream, into the vapor cloud to accomplish any of the above).**

Water spray is particularly effective on fires of flammable liquids and volatile solids having flash points above 37.8°C (100°F).

Regardless of the above, water spray can be used successfully on flammable liquids with low flash points. The effectiveness depends particularly on the method of application. With proper nozzles, even gasoline spill fires of some types have been extinguished when coordinated hose lines were used to sweep the flames off the surface of the liquid. Furthermore, water spray carefully applied has frequently been used with success in extinguishing fires involving flammable liquids with high flash points (or any viscous liquids) by causing frothing to occur only on the surface, and this foaming action blankets and extinguishes the fire.

PUBLICATION DATA

The North American Emergency Response Guidebook (NAERG96) was prepared by the staff of Transport Canada, the U.S. Department of Transportation, and the Secretariat of Communications and Transportation of Mexico with the assistance of many interested parties from government and industry.

NAERG96 is based on earlier Transport Canada and U.S. DOT emergency response guidebooks. The first printing of NAERG96 (edition RSPA P 5800.7) included 860,000 English copies, 20,000 French copies and 175,000 Spanish copies. Past printings of the U.S. DOT ERG include: 1993 - 1.4 million copies (RSPA P 5800.6); 1990 - 1.2 million copies (DOT P 5800.5); 1987 - 1.1 million copies (DOT P 5800.4); 1984 - 748,000 copies (DOT P 5800.3); 1980 - 741,000 (DOT P 5800.2). Since 1979, Transport Canada has published four editions of the Dangerous Goods Initial Emergency Response Guide and distributed more than 500,000 copies.

DISTRIBUTION OF THIS GUIDEBOOK

The primary objective is to place one copy of the NAERG96 in each emergency service vehicle throughout North America, through distribution to Federal, state, provincial and local public safety authorities. The distribution of this guidebook is being accomplished through the voluntary cooperation of a network of key agencies. Emergency service organizations that have not yet received copies of NAERG96 should contact the respective distribution center in their country, state or province. In the U.S., information about the distribution center for your location may be obtained from the Hazardous Material Information Exchange (HMIX). You can access the HMIX through your computer modem: 708-252-3275 (Effective 09/01/96 dial 630-252-3275), or via the Internet: hmix.dis.anl.gov (146.137.100.54). In Canada, contact CANUTEC at 613-992-4624 or via Internet at canutec@tc.gc.ca for information. In Mexico, call SCT at 52-5-684-1275.

REPRODUCTION and RESALE

Copies of NAERG96 which are provided free of charge to fire, police and other emergency services may not be resold. NAERG96 (RSPA P 5800.7) may be reproduced without further permission subject to the following:

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Constructive comments concerning NAERG96 are solicited; in particular, comments concerning its use in handling incidents involving dangerous goods. Comments should be addressed to:

In Canada:

Chief, CANUTEC
Transport Dangerous Goods
Transport Canada
Ottawa, Ontario
Canada K1A 0N5

Phone: 613-992-4624 (information)
FAX: 613-954-5101
Internet: canutec@tc.gc.ca

In the U.S.:

U. S. Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Initiatives and Training (DHM-50)
Washington, DC 20590-0001

Phone: 202-366-4900
FAX: 202-366-7342
Internet: welisten@rspa.dot.gov

In Mexico:

Secretaría de Comunicaciones y Transportes
Dirección General de Autotransporte Federal
Dirección de Transporte de Materiales y Residuos Peligrosos
Calzada de las Bombas No. 411, 7o. Piso,
Colonia San Bartolo Coapa,
Coyoacán 04800, D.F.

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EMERGENCY RESPONSE TELEPHONE NUMBERS

CANADA

1. CANUTEC

613-996-6666

(Collect calls are accepted)

UNITED STATES

1. CHEMTREC®

1-800-424-9300

(Toll-free in the U.S. and Canada)

703-527-3887 For calls originating elsewhere

(Collect calls are accepted)

or

2. CHEM-TEL, INC.

1-800-255-3924

(Toll-free in the U.S. and Canada)

813-979-0626 For calls originating elsewhere

(Collect calls are accepted)

3. MILITARY SHIPMENTS

703-697-0218 - Explosives/ammunition incidents

(Collect calls are accepted)

1-800-851-8061 - All other dangerous goods incidents

MEXICO

1. SETIQ

91-800-00-214 in the Mexican Republic

For calls originating in Mexico City and the Metropolitan Area

575-0838, 575-0842 or 559-1588

For calls originating elsewhere, call

0-11-52-5-575-0838 or 0-11-52-5-575-0842

2. CECOM

91-800-00-413 in the Mexican Republic

For calls originating in Mexico City and the Metropolitan Area

550-1496, 550-1552, 550-1485, or 550-4885

FAX 616-5560 or 616-5561

For calls originating elsewhere, call

0-11-52-5-550-1496, 0-11-52-5-550-1552, 0-11-52-5-550-1485, or 0-11-52-5-550-4885

For additional details see the section entitled **"WHO TO CALL FOR ASSISTANCE"**.

**THIS DOCUMENT SHOULD NOT BE USED TO
DETERMINE COMPLIANCE WITH THE
DANGEROUS GOODS REGULATIONS
OR
TO CREATE WORKER SAFETY DOCUMENTS
FOR SPECIFIC CHEMICALS**



**U.S. Department of Transportation
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